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# BGES, INC.

Environmental Consultants



FOURTH AVENUE AND GAMBELL STREET  
ANCHORAGE, ALASKA

PHASE II ENVIRONMENTAL SITE ASSESSMENT

MAY 2005

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JUN 06 2005

DEPT. OF ENVIRONMENTAL  
CONSERVATION

Submitted to:

PAUL MANEY

Submitted by:

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CONSERVATION**

**FOURTH AVENUE AND GAMBELL STREET  
ANCHORAGE, ALASKA**

**PHASE II ENVIRONMENTAL SITE ASSESSMENT**

**MAY 2005**

**Submitted to: Paul Maney**

**Submitted by: BGES, INC.**

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**04-038-03**

## TABLE OF CONTENTS

1.0 INTRODUCTION .....	1
2.0 BACKGROUND .....	1
3.0 PREVIOUS SITE WORK .....	1
4.0 MARCH AND APRIL 2005 PHASE II ESA FIELD WORK .....	2
4.1 Modifications to the Work Plan .....	2
4.2 Soil Borings and Sampling .....	2
4.3 Soil Screening and Analysis .....	3
4.4 Monitoring Well Installation .....	4
4.5 Monitoring Well Development .....	4
4.6 Water Elevation Measurements .....	4
4.7 Monitoring Well Sampling .....	5
4.8 Monitoring Well Surveying .....	5
5.0 EVALUATION OF LABORATORY DATA .....	5
6.0 QUALITY CONTROL .....	6
7.0 WATER WELL SURVEY .....	7
8.0 DISPOSAL OF INVESTIGATIVE DERIVED WASTES .....	7
9.0 CONCLUSIONS AND RECOMMENDATIONS .....	8
10.0 EXCLUSIONS AND CONSIDERATIONS .....	8

### LIST OF FIGURES (at end of report)

<b>FIGURE 1</b>	<b>Site Vicinity Map</b>
<b>FIGURE 2</b>	<b>Site Plan/Groundwater Elevation Contours</b>
<b>FIGURE 3</b>	<b>Water Well Survey</b>

### LIST OF TABLES (at end of report)

<b>TABLE 1</b>	<b>Soil Samples Photoionization Detector Readings</b>
<b>TABLE 2</b>	<b>Soil Samples Laboratory Analytical Results</b>
<b>TABLE 3</b>	<b>Groundwater Samples Laboratory Analytical Results</b>

### LIST OF APPENDICES

<b>APPENDIX A</b>	<b>Photographs</b>
<b>APPENDIX B</b>	<b>Soil Boring Logs and Well Construction Diagrams</b>
<b>APPENDIX C</b>	<b>Water Monitoring Logs</b>
<b>APPENDIX D</b>	<b>Laboratory Analytical Data</b>
<b>APPENDIX E</b>	<b>Water Well Survey Data</b>
<b>APPENDIX F</b>	<b>Investigative-Derived Waste Disposal Documentation</b>

## 1.0 INTRODUCTION

BGES, Inc. (BGES) was retained by Mr. Paul Maney, owner of the subject property, located between Gambell and Hyder Street and along 4<sup>th</sup> Avenue (Figure 1), to perform a Phase II Environmental Site Assessment (ESA). The Phase II ESA entailed advancement of three soil borings and installation of monitoring wells in these borings along with associated soil and groundwater sampling. The purpose of this sampling was to assess the soil and groundwater quality at the subject site. The fieldwork was performed on March 12<sup>th</sup> and 13<sup>th</sup> (soil borings and monitoring well installations), and April 6, 2005 (groundwater sampling), in accordance with our work plan dated February 16, 2005, and approved by the Alaska Department of Environmental Conservation (ADEC) on February 28, 2005.

## 2.0 BACKGROUND

The property is located in the downtown (northern) portion of Anchorage, Alaska (Figure 1). The site is currently undeveloped and used as a parking lot for the Anchorage Job Center. The surface at the property is unpaved and generally level. An Alaska Communications System antenna tower is situated on the southeast portion of the property. The property was formerly occupied by a variety of businesses, including C&K Cleaners (which may have been a drycleaners) from approximately 1968 through 1970, and NC Tire Center, which was the last occupant of the building on site. Figure 2 shows the layout of the subject property.

## 3.0 PREVIOUS SITE WORK

A Phase I ESA was conducted at the subject property in 1993. The findings of the Phase I ESA indicated that underground storage tanks (USTs) were thought to exist at locations in the northeast corner of the property [where we did subsequently encounter USTs as described in our September 2004 Phase II Environmental Site Assessment (ESA) Report], and in the north-central portion of the property, where USTs were not encountered during our subsurface assessment.

A Phase II ESA was reportedly conducted approximately 6 years ago, but the results have not been made available to the current property owner, Paul Maney. It is Mr. Maney's understanding that several USTs were removed and at least one monitoring well was installed. A Phase II ESA was conducted by BGES during the summer of 2004. This site assessment included excavation of six exploratory test pits with associated soil sampling and removal of five hydraulic lifts and two associated hydraulic USTs and two heating oil USTs. A relatively small volume of soils with hydrocarbon concentrations exceeding ADEC cleanup criteria was encountered and removed from the

site for treatment and disposal, during removal of the hydraulic lifts and associated USTs. The test pit excavations revealed numerous soil samples with tetrachloroethene (PCE) concentrations exceeding the ADEC cleanup criterion. In addition, during this assessment, BGES observed an existing monitoring well at the property (Figure 2). This monitoring well, named MW-1, was sampled on October 22, 2004. The groundwater sample exceeded the ADEC cleanup criterion for PCE by four orders of magnitude. Based on the results of the soil and groundwater sampling, and a meeting with the ADEC, it was decided that additional investigation was needed including a well survey; this work is the subject of this report as described below.

#### 4.0 MARCH AND APRIL 2005 PHASE II ESA FIELD WORK

As stated in the approved Work Plan, three soil borings were advanced and completed as monitoring wells. Soil samples were collected during drilling and the monitoring wells were developed and sampled. Top of casing elevations were measured relative to each other and a local surface elevation. A water well survey was performed to identify potential groundwater users in the vicinity of the site. The following paragraphs discuss the results of the Phase II ESA.

##### 4.1 Modifications to the Work Plan

Based on the results of the first soil boring (MW-2), it was decided that sampling would occur on 5-foot intervals from the surface to 18 feet below grade (where the contaminant concentrations appeared to be the greatest), and then continuously to the total depth of the borings.

##### 4.2 Soil Borings and Sampling

A utility clearance for the areas of the soil borings was performed on March 11, 2005. Three soil borings were advanced on March 12 and 13, 2005, using hollow-stem auger drilling technology in the approximate locations shown on Figure 2. Two of the soil borings (MW-2 and MW-3) were advanced to a depth of approximately 45 feet below grade (bg), and one soil boring (MW-4) was advanced to approximately 50 feet bg. Photographs 1 through 3 in Appendix A show the borings being advanced and/or the monitoring wells being completed. The borings were terminated when a clay layer was reached (Photograph 4 in Appendix A) to prevent creating vertical migration pathways to a potential deeper aquifer. Continuous drive split-spoon samples were collected for the entire depth of MW-2 (beginning at 2 feet bg), and at 5-foot intervals until 18 feet bg in MW-3 and MW-4 and then continuously thereafter. The samples were logged with geologic descriptions and a portion of the soil from each split-spoon sample was placed in Ziploc® bags for headspace field screening using a Fourth and Gambell, Phase II ESA

Photoionization Detector (PID). The soil in the split-spoons was typically also screened directly in the spoon (except during periods of moderate to heavy precipitation).

In general, the soil borings indicated the presence of sand and gravel until a clay layer was encountered near the base of the borings. Groundwater was encountered at about 41 feet bg in MW-2 and MW-3, and at about 45 feet bg in MW-4. Geologic logs describing the soil samples are included in Appendix B. Soils from the boreholes were placed in drums and stored on site for future disposal (Photograph 5 in Appendix A).

The soil samples that were selected for laboratory analysis, based on the field screening as described below, were placed in laboratory-supplied containers, which were stored in a chilled cooler, until they were hand-delivered under chain of custody protocol to SGS Environmental Services in Anchorage for analysis. As a quality control measure, a trip blank prepared by the laboratory accompanied the samples during the entire sampling and handling process.

#### 4.3 Soil Screening and Analysis

The soils that were placed in Ziploc® bags were allowed to warm for up to 1 hour inside a vehicle with a heater, prior to being screened using a Thermo Environmental Instruments 580 EZ PID. The PID was calibrated prior to use with isobutylene calibration gas. After warming, the bags were agitated for approximately 15 seconds, and then the tip of the PID was inserted into the headspace of the bags. The greatest PID reading was recorded for each sample. The results of the PID screening are presented in Table 1 and included on the geologic logs in Appendix B.

It should be noted that none of the borings exhibited any hydrocarbon odors during drilling. The PID readings in the soil samples that were screened from the boreholes ranged from 0 to 69.1 parts per million (ppm). Generally, the samples with the greatest PID readings from each borehole were submitted for laboratory analysis of volatile organic compounds (VOCs) by SW8260B. Samples S-9, collected from MW-2 at 18 to 20 feet bg; S-14, collected from MW-2 at 28 to 30 feet bg; S-19, collected from MW-2 at 38 to 40 feet bg; S-5, collected from MW-3 at 20-22 feet bg; S-11, collected from MW-3 at 32 to 34 feet bg; S-18, collected from MW-3 at 46 to 48 feet bg; S-4, collected from MW-4 at 18 to 20 feet bg; and S-13, collected from MW-4 at 36 to 38 feet bg were submitted for laboratory analysis.

#### 4.4 Monitoring Well Installation

All three of the soil borings described above were completed as monitoring wells, with 2-inch diameter polyvinyl chloride (PVC) casings and 20-slot PVC well screens, constructed in the three angereed soil borings. The well screens were 10 feet long and placed in such a manner as to approximately bisect the water table at the time of drilling. The sand pack surrounding the casings was composed of No. 8/12 Colorado filter sand. The filter sand extended approximately 1.5 to 2 feet above the top of the well screen. A seal was constructed using bentonite pellets above the filter sand. The monitoring wells were completed with a "flush-grade" construction with a vault box sealed in place with an asphalt patch. Well construction details are included in Appendix B.

#### 4.5 Monitoring Well Development

The monitoring wells were developed on April 6, 2005 (MW-2, MW-3, and MW-4) using a disposable, polyethylene bailer (MW-1 was installed previously and presumed to have been developed in the past). The water column in the wells was agitated to suspend as much sediment as possible in the water, which was then removed and placed into a 5-gallon bucket and then transferred to a 55-gallon drum. The drum was stored on site pending the results of the water analyses. Approximately 5 gallons of water were removed from each well, at which time the discharge had slightly less sediment. Because of the volume of sediment still present, the wells were allowed to sit for approximately 30 minutes prior to sampling. The wells exhibited a low to moderate recovery speed during development and sampling.

#### 4.6 Water Elevation Measurements

Prior to monitoring well development and sampling on April 6, 2005, the depths to water in the wells were measured using an electronic water level indicator. The water elevations and groundwater contours are shown on Figure 2. Based on information from this groundwater monitoring, the local groundwater flow direction is to the northeast at a gradient of approximately 0.01 foot per linear foot. The water levels measured in the wells on April 6 were approximately 1.5 to 3.5 feet higher than at the time of drilling for MW-2 and MW-3, and approximately 7 feet higher than at the time of drilling in MW-4. For this reason, the water level in MW-4 was actually higher than the top of the screen at the time of sampling. The depth to water in MW-1 was approximately 0.13 foot lower than the depth to water measured during the October, 2005 monitoring of this well.

#### 4.7 Monitoring Well Sampling

The monitoring wells were sampled on April 6, 2005. The volume of water in each well was calculated based on the water elevation and total well depth measurements described above. MW-1 was purged of three well volumes. The remaining wells (MW-2, MW-3, and MW-4) were each purged of more than three well volumes, as part of the development process. Prior to sampling, measurements of pH, conductivity, turbidity, dissolved oxygen, temperature, salinity, total dissolved solids, and oxidation-reduction potential (ORP) were made by placing a bailed sample into a container and utilizing a Horiba U22 water quality meter. These field water quality parameters are summarized in Appendix C. Only one or two field water quality measurements were made for MW-2, MW-3, and MW-4 since the sampling followed well development, when considerably more than three well volumes were removed, and because of the increased sediment load.

A disposable, polyethylene bailer was used to develop/purge and sample each well. The samples were collected by carefully filling three, 40-milliliter amber vials preserved with hydrochloric acid (HCL) and inspecting them to make sure that no air bubbles were present. As a quality control measure, a trip blank prepared by the laboratory accompanied the jars scheduled for volatile analyses during the entire transportation and sampling process. The samples were hand-delivered in a chilled cooler under chain of custody protocol to SGS Laboratory in Anchorage.

#### 4.8 Monitoring Well Surveying

The ground surface and Top of Casing (TOC) elevation of each of the monitoring wells were surveyed relative to each other and to a fixed reference point. The top-of-casing elevations were surveyed by BGES personnel to the nearest 0.01 foot.

### 5.0 EVALUATION OF LABORATORY DATA

The analytical results for the Phase II ESA soil samples are listed in Table 2, and the groundwater sample results are listed in Table 3 and shown on Figure 2, and are compared to the ADEC Method 2 Cleanup Criterion listed in 18AAC 75.341 - Table B2 for soils [30 micrograms per kilogram ( $\mu\text{g/Kg}$ ) for PCE and the 18AAC75.345 - Table C cleanup criterion for water [5 micrograms per liter ( $\mu\text{g/L}$ ) for PCE]. Copies of the analytical reports are included in Appendix D.

The soil samples from all three soil borings were analyzed for volatile organic compounds (VOCs) and had PCE concentrations that exceeded the ADEC cleanup criterion, with values ranging from 542 to



79,500 µg/kg. These soil sample analytical results indicate that PCE contamination in the soil is both aerially and vertically extensive. The greatest PCE concentrations appear to be located between 18 feet bg and the water table (approximately 40 feet bg). The only other parameters that were detected in the soil samples were 1,3,5-trimethylbenzene and 1,2,4-trimethylbenzene detected in MW-2. These compounds are used as solvents and in dyes and paint thinners. The lack of detection of "daughter" compounds associated with PCE (trichloroethene, dichloroethene, vinyl chloride) indicates that biological degradation of the contaminants is not occurring at a significant rate.

The groundwater samples were analyzed for VOCs and exhibited PCE concentrations ranging from 70.7 µg/L in MW-2 to 1,790 µg/L in MW-3, which all exceed the ADEC cleanup criterion of 5 µg/L. It should be noted that MW-4, which is located somewhat upgradient of the majority of the site, also contained PCE above the ADEC cleanup criterion (5 µg/L) with a concentration of 372 µg/L. No other VOCs were detected in the groundwater samples.

## 6.0 QUALITY CONTROL

The soil trip blank sample had non-detectable concentrations of all analytes; therefore, cross-contamination of samples is not likely to have occurred. In addition, the soil method blank had non-detectable concentrations of all analytes. The case narrative for the soil samples indicated several matrix spike samples and laboratory check samples that did not meet quality control criteria, however, these samples were not associated with any analytes that were detected above the practical quantitation limit (PQL), and therefore, the data are not considered to have been adversely affected.

The water trip blank had non-detectable concentrations of all analytes; therefore, cross-contamination of samples is not likely to have occurred. The water method blank had non-detectable concentrations of all analytes except for estimated concentrations (values were between the PQL and the method detection limit) of 1,2,4, trichlorobenzene and 1,2,3 trichlorobenzene. However, the associated parameters were not detected in the soil samples at concentrations exceeding the PQL; therefore, the validity of the data is not considered to be adversely affected.

The case narrative for the soil samples indicated several quality control samples with a limited number of analytes that were out of quality control criteria. However, most of the associated parameters were not detected in the soil samples at concentrations exceeding the PQL; therefore, the validity of the data is not considered to be adversely affected. The continuing calibration verification sample for

dichlorodifluoromethane was biased low and did not meet the laboratory quality control criterion. Therefore, the PQL for this parameter in associated samples should be considered an estimated value.

## 7.0 WATER WELL SURVEY

A water well survey was conducted for a ¼-mile search radius from the subject property. The United States Geological Survey and Alaska Department of Natural Resources databases were reviewed. The Alaska Department of Environmental Conservation database does not store information about private wells, but an inquiry to the agency revealed that there are no public water supply systems within ¼ of the subject property. Furthermore, the Municipality of Anchorage Water Well database was reviewed but no wells were found. The following water supply wells were located during our search:

Well Number	Date of Well Construction	Depth of Well (feet)
SBC1300318AACD1 007	7/11/61	49.5
SBC1300318ADAB1 006	8/2/48	57.0
SBC1300318ADAB2 006	8/1/48	20
SBC1300318ADAB3 006	1/1/52	139
SBC1300318ADBD1 001	10/1/53	227

Information concerning these wells is included in Appendix E and shown on Figure 3. In addition, residents at 710 and 720 East Third Avenue, located across the alley to the north of the subject property, were questioned regarding the presence of water supply wells on their property. No wells were identified by these persons. Furthermore, we conducted a "drive-by" reconnaissance of these properties, as well as the properties identified in the table above as potentially having water supply wells. No wells were observed during this reconnaissance.

## 8.0 DISPOSAL OF INVESTIGATIVE DERIVED WASTES

As a result of the soil boring and monitoring well drilling and sampling activities, eight full drums of soil and one drum of water (approximately ¼ full) were generated. These drums were disposed of by

Emerald Alaska as hazardous waste. Copies of the manifest and disposal documentation are included in Appendix F.

## 9.0 CONCLUSIONS AND RECOMMENDATIONS

Three soil borings were advanced in the approximate locations shown on Figure 2, and all three were completed as monitoring wells. Soil samples and groundwater samples were collected and analyzed for VOCs. The soil and water samples exhibited PCE concentrations that are several orders of magnitude greater than ADEC cleanup standards. The lack of "daughter" constituents associated with PCE in the laboratory analyses indicates that biodegradation of the contaminant is not occurring at a significant rate. This may be the case because of the generally coarse grained nature of the soils which would allow oxygen to permeate to the subsurface, and the fact that biodegradation of PCE typically occurs under anaerobic conditions.

As a result of the drilling and sampling activities, eight drums of soil cuttings and 1 drum of water were generated and disposed of as hazardous wastes.

A water well survey was conducted for the area within ¼ mile of the subject property. Five water supply wells were located in the databases. These wells were not observed during a "drive-by" reconnaissance. No other wells were identified in the area that was searched.

It is recommended that a copy of this report be provided to the ADEC for their review.

## 10.0 EXCLUSIONS AND CONSIDERATIONS

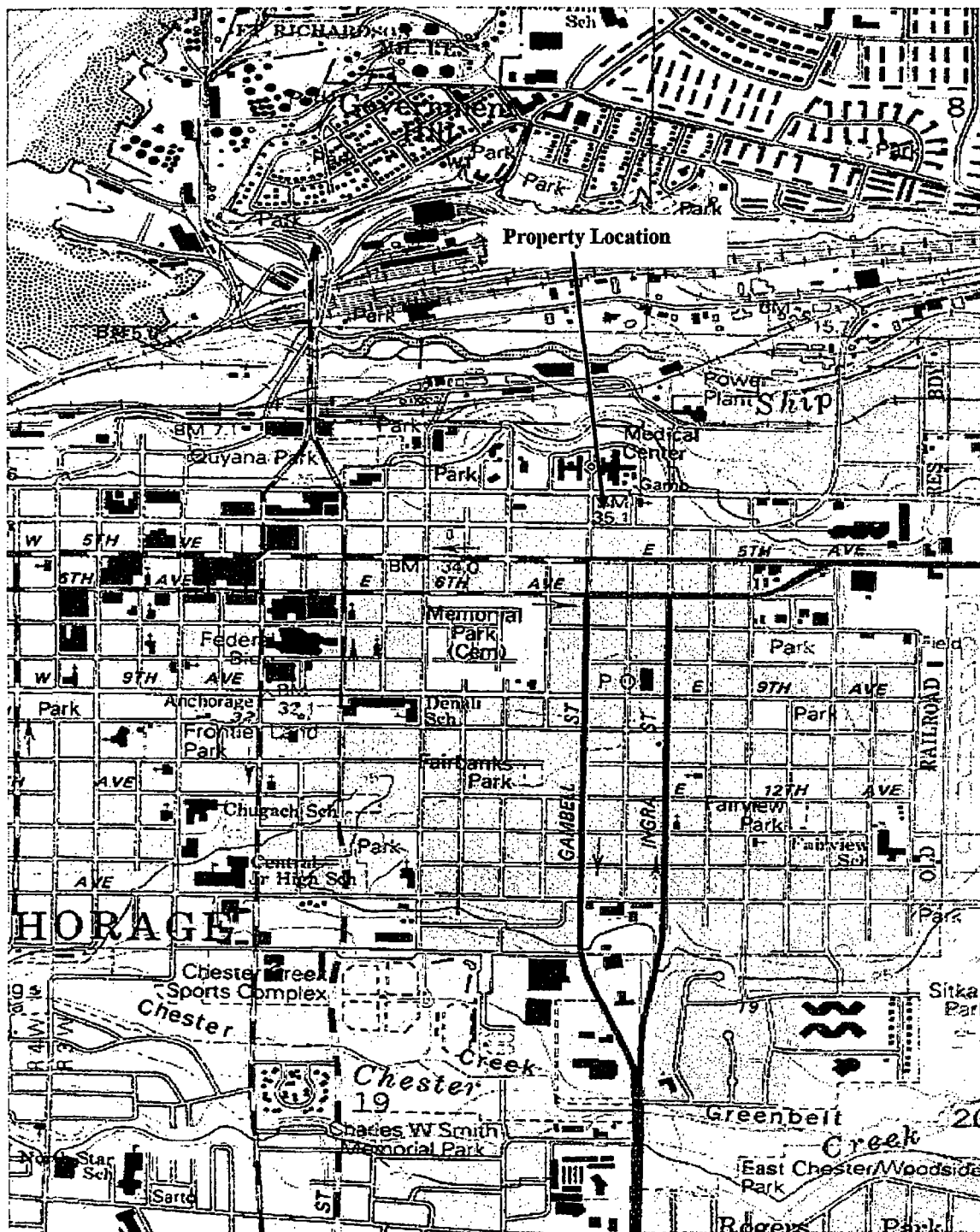
This report presents facts, observations, and inferences based on conditions observed during the period of our project activities, and only those conditions that were evaluated as part of our scope of work. Our conclusions and recommendations are based on our observations and the results of our research, and as such, rely on the accuracy of the reports and other correspondences that were reviewed. In addition, changes to site conditions may have occurred since we completed our initial project activities. These changes may be from the actions of man or nature. Changes in regulations may also impact the interpretation of site conditions. BGES will not disclose our findings to any parties other than our client as listed above, except as directed by our client, or as required by law.

Prepared by:

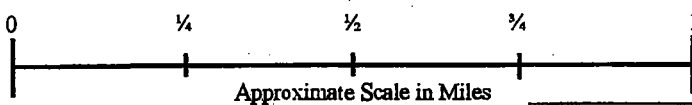
Robert N. Braunstein, C.P.G.  
Principal Geologist

Reviewed by:

Keith O. Guyer, R.G.  
Principal Geologist



Source: USGS Map, Anchorage (A-8) NW, Alaska 1979, Revised 1994. Note: Contour Interval is 5 Meters



FOURTH AVENUE AND GAMBELL  
STREET  
SITE VICINITY MAP

BGES, INC.

May 2005

Figure 1

**TABLE 1**  
**FOURTH AVENUE AND OAKBELL STREET**  
**SOIL SAMPLES**  
**PHOTOIONIZATION DETECTOR READINGS**

Soli Boring	Sample No.	Sample Depth (feet bg)	PID Reading in Spoon (ppm)	PID Headspace Reading (ppm)	PCE (ug/Kg)	Description
MW-2	N/A	0 to 2	N/A	N/A	N/A	Sand and gravel
	S-1	2 to 4	0	0.5	N/A	Coarse grained sand and gravel
	S-2	4 to 6	0	8.2	N/A	Very fine to fine grained sand and gravel
	S-3	6 to 8	0	11.8	N/A	Medium to coarse grained sand and gravel
	S-4	8 to 10	0	6.1	N/A	Fine to coarse grained sand, slightly silty, and gravel
	S-5	10 to 12	0	16.2	N/A	Medium grained sand and gravel
	S-6	12 to 14	0	11.4	N/A	Fine to coarse grained sand, some gravel
	S-7	14 to 16	0	9.6	N/A	Coarse grained sand, trace gravel
	S-8	16 to 18	0	6.1	N/A	Fine to coarse grained sand and gravel
	Lab S-9	18 to 20	2.3	57.2	29,700	Medium to coarse grained sand and gravel
	S-10	20 to 22	0	6.0	N/A	Fine to coarse grained sand, trace gravel
	S-11	22 to 24	0	11.5	N/A	Medium grained sand, trace gravel
	S-12	24 to 26	0	4.2	N/A	Gravel and coarse grained sand
	S-13	26 to 28	0	11.5	N/A	Coarse grained sand, trace gravel
	Lab S-14	28 to 30	0	11.5	79,500	Medium to coarse grained sand, 3-inch peat layer
	S-15	30 to 32	12.7	38.4	N/A	Fine to coarse grained sand
	S-16	32 to 34	0.8	6.1	N/A	Fine to medium grained sand
	S-17	34 to 36	0.9	20	N/A	Fine grained sand
	S-18	36 to 38	0	40	N/A	Medium to coarse grained sand, trace clay
	Lab S-19	38 to 40	0	69.1	542	Coarse grained sand
	S-20	40 to 42	0	47.9	N/A	Medium grained sand, saturated
	S-21	42 to 44	0	49.0	N/A	Very fine grained sand, slightly silty, saturated
	S-22	44 to 46	0	65.4	N/A	Coarse grained sand, saturated and clay
MW-3	N/A	0 to 5	N/A	N/A	N/A	Very fine grained sand, very silty, some gravel
	S-1	5 to 7	N/A	1.2	N/A	Medium to coarse grained sand and gravel
	N/A	7 to 10	N/A	N/A	N/A	Sand and gravel
	S-2	10 to 12	N/A	4.8	N/A	Coarse grained sand and gravel
	N/A	12 to 15	N/A	N/A	N/A	Sand and gravel
	S-3	15 to 17	N/A	7.0	N/A	Fine to coarse grained sand and gravel
	N/A	17 to 18	N/A	N/A	N/A	Sand and gravel
	S-4	18 to 20	N/A	3.7	N/A	Very fine to coarse grained sand and gravel
	Lab S-5	20 to 22	N/A	10.1	3,590	Medium to coarse grained sand and gravel
	S-6	22 to 24	N/A	3.8	N/A	Fine to medium grained sand and gravel
	S-7	24 to 26	N/A	6.8	N/A	Medium to coarse grained sand, some gravel
	S-8	26 to 28	N/A	16.0	N/A	Medium to coarse grained sand, some gravel
	S-9	28 to 30	N/A	11.4	N/A	Fine grained sand, some gravel
	S-10	30 to 32	N/A	6.3	N/A	Medium to coarse grained sand, trace gravel
	Lab S-11	32 to 34	N/A	16.0	5,210	Fine to coarse grained sand, some gravel
	S-12	34 to 36	N/A	5.5	N/A	Very fine to medium grained sand
	S-13	36 to 38	N/A	11.3	N/A	Medium grained sand
	S-14	38 to 40	N/A	3.8	N/A	Medium grained sand, moist
	S-15	40 to 42	N/A	6.6	N/A	Medium grained sand, saturated
MW-4	S-16	42 to 44	N/A	0.0	N/A	Fine to medium grained sand, trace gravel, saturated
	S-17	44 to 46	N/A	0.0	N/A	Medium grained sand, saturated
	Lab S-18	46 to 48	N/A	7.1	3,190	Very fine to fine grained sand, saturated, and clay
	N/A	0 to 5	N/A	N/A	N/A	Sand and gravel
	S-1	5 to 7	N/A	0.0	N/A	Fine to coarse grained sand, some clay
	N/A	7 to 10	N/A	N/A	N/A	Sand and gravel
	S-2	10 to 12	N/A	2.8	N/A	Very fine to coarse grained sand, silty, and gravel
	N/A	12 to 15	N/A	N/A	N/A	Sand and gravel
	S-3	15 to 17	N/A	0.2	N/A	Coarse grained sand and gravel
	N/A	17 to 18	N/A	N/A	N/A	Sand and gravel
	Lab S-4	18 to 20	N/A	55.9	11,100	Coarse grained sand and gravel
	S-5	20 to 22	N/A	0.0	N/A	Coarse grained sand and gravel
	S-6	22 to 24	N/A	16.4	N/A	Fine to coarse grained sand and gravel
	S-7	24 to 26	N/A	17.1	N/A	Fine to medium grained sand and gravel
	S-8	26 to 28	N/A	9.3	N/A	Coarse grained sand and gravel
	S-9	28 to 30	N/A	0.0	N/A	Coarse grained sand, slightly silty, some gravel
	S-10	30 to 32	N/A	0.0	N/A	Coarse grained sand, some gravel
	S-11	32 to 34	N/A	1.1	N/A	Medium grained sand
	S-12	34 to 36	N/A	0.0	N/A	Very fine to coarse grained sand
Lab	S-13	36 to 38	N/A	3.7	2,130	Fine grained sand, moist
	S-14	38 to 40	N/A	0.0	N/A	Fine grained sand, moist
	S-15	40 to 42	N/A	0.0	N/A	Very fine to coarse grained sand, slightly silty, saturated
	S-16	42 to 44	N/A	0.0	N/A	Very fine grained sand, saturated
	S-17	44 to 46	N/A	0.0	N/A	Very fine grained sand, silty, saturated
	S-18	46 to 48	N/A	0.0	N/A	Medium grained sand, saturated, and clay

bg = Below Grade; PID = Photoionization Detector; ppm = Parts Per Million; N/A = Not Applicable; ug/Kg = micrograms per kilogram

Lab [ ] = sample submitted to laboratory PCE = Tetrachloroethene

Note: PID used was Thermo Environmental Instruments 580 EZ; Where screening was not performed in spoon was because of rainy conditions

TABLE 2  
FOURTH AVENUE AND GAMBELL STREET  
SOIL SAMPLES  
LABORATORY ANALYTICAL RESULTS

BGES, INC.

Soil Sample No.	Sample Depth (feet bg)	Parameter <sup>1</sup>	Results (µg/Kg)	PQL (µd/Kg)	Analytical Method	ADEC Soil Cleanup level (µg/Kg)
MW-2 S-9	18-20	Tetrachloroethene	29,700	577	SW8260B	30 <sup>2</sup>
		All other VOCs	ND	Varies	SW8260B	Varies
MW-2 S-14	28-30	Tetrachloroethene	79,500	1,350	SW8260B	30 <sup>2</sup>
		1,3,5-Trimethylbenzene	38.0	27.0	SW8260B	NE
		1,2,4-Trimethylbenzene	32.6	27.0	SW8260B	NE
		All other VOCs	ND	Varies	SW8260B	Varies
MW-2 S-19	38-40	Tetrachloroethene	542	16.2	SW8260B	30 <sup>2</sup>
		All other VOCs	ND	Varies	SW8260B	Varies
MW-3 S-5	20-22	Tetrachloroethene	3,590	128	SW8260B	30 <sup>2</sup>
		All other VOCs	ND	Varies	SW8260B	Varies
MW-3 S-11	32-34	Tetrachloroethene	5,210	201	SW8260B	30 <sup>2</sup>
		All other VOCs	ND	Varies	SW8260B	Varies
MW-3 S-18	46-48	Tetrachloroethene	3,190	170	SW8260B	30 <sup>2</sup>
		All other VOCs	ND	Varies	SW8260B	Varies
MW-4 S-4	18-20	Tetrachloroethene	11,100	359	SW8260B	30 <sup>2</sup>
		All other VOCs	ND	Varies	SW8260B	Varies
MW-4 S-13	36-38	Tetrachloroethene	2,130	22.6	SW8260B	30 <sup>2</sup>
		All other VOCs	ND	Varies	SW8260B	Varies

<sup>1</sup> Only parameters listed have results greater than PQL

<sup>2</sup> Soil cleanup criteria from Alaska Department of Environmental Conservation (ADEC) 18AAC 75.341, Table B1

Border = Concentration exceeds corresponding ADEC cleanup criterion

bg = below grade

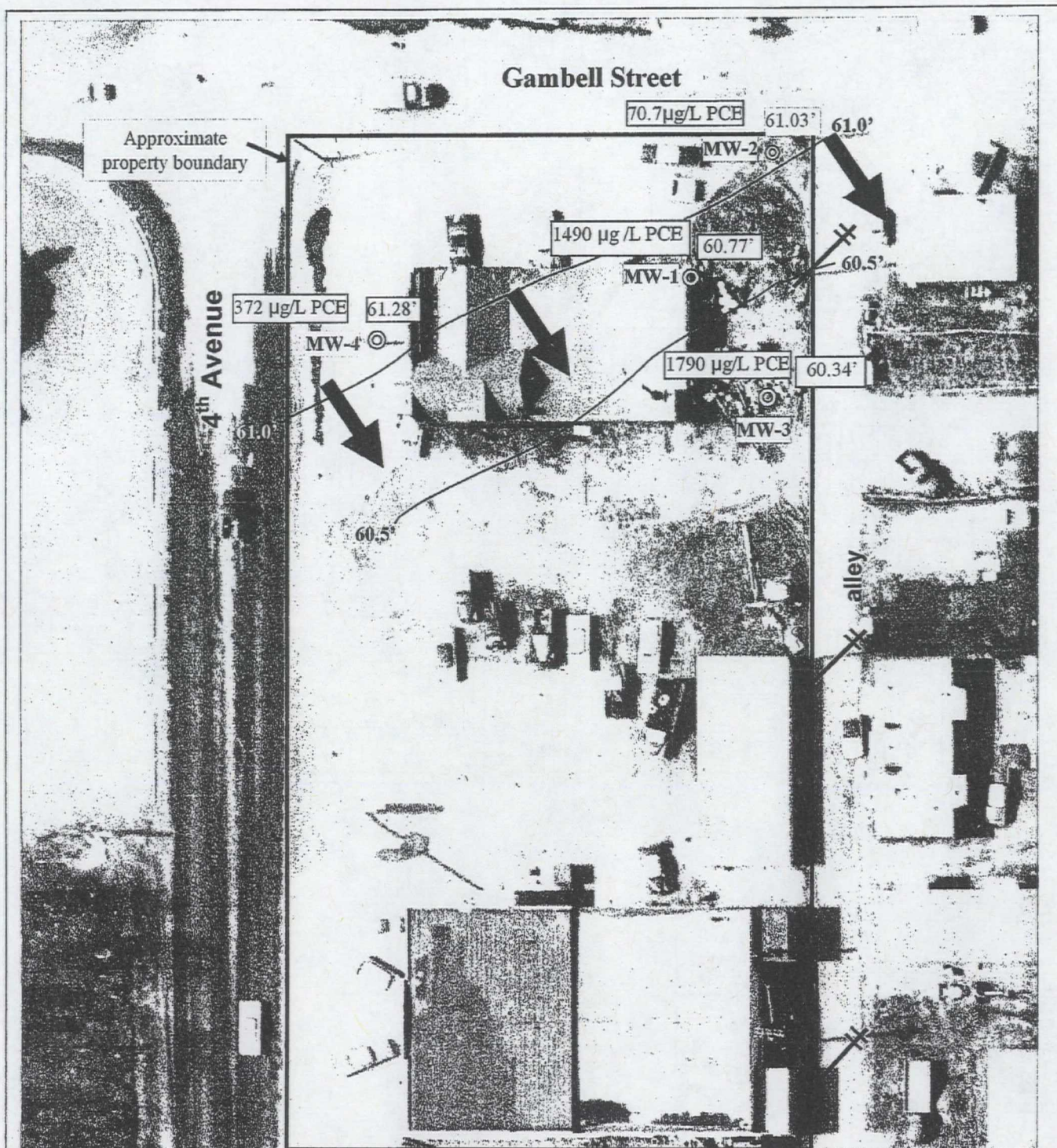
NE = Not Established

µg/Kg = Micrograms per Kilogram

PQL = Practical Quantitation Limit

ND = Non-Detectable





372  $\mu\text{g/L}$  PCE

61.28'

MW-4 ⊙ = Monitoring Well 4 location; tetrachloroethene concentration of 372 micrograms per liter; depth to water of 61.28 feet measured on April 6, 2005

→ = Approximate groundwater flow direction

**FOURTH AVENUE AND GAMBELL STREET  
SITE PLAN/GROUNDWATER ELEVATION  
CONTOURS**

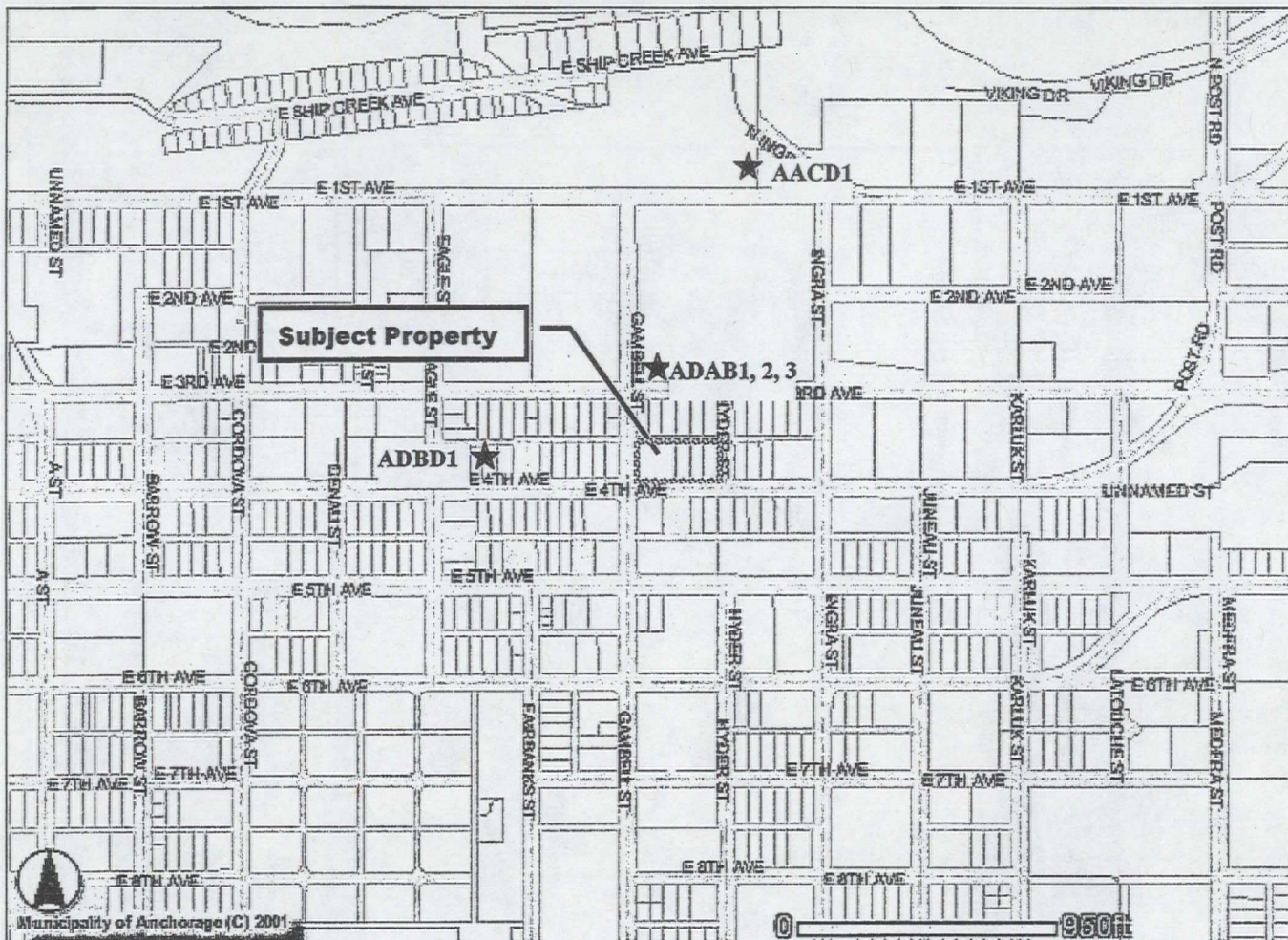
Source: AeroMap U.S. Scale: 1 inch = 50 feet  
May 14, 1960 Aerial Photograph

BGES, INC.

May 2005

Figure 2





★ = Water Well

Local Well Number	Date Well Constructed	Depth of well (feet)
SBC1300318AACD1	07-11-61	49.5
SBC1300318ADAB1	08-02-48	57.0
SBC1300318ADAB2	08-01-48	20
SBC1300318ADAB3	01-01-52	139
SBC1300318ADBD1	10-01-53	227

Source: U.S. Geological Survey-Water Resources Department



FOURTH AVENUE AND GAMBELL STREET  
Water Well Survey

BGES, INC.

May 2005

Figure 3



**TABLE 3**  
**FOURTH AVENUE AND GAMBELL STREET**  
**GROUNDWATER SAMPLES**  
**LABORATORY ANALYTICAL RESULTS**

Sample Name	Parameter <sup>1</sup>	Results (µg/L)	Analytical Method	Method Two Groundwater Cleanup Level (pg/L) <sup>2</sup>
MW-1	PCE	1490	SW8260B	5
MW-2	PCE	70.7	SW8260B	5
MW-3	PCE	1790	SW8260B	5
MW-4	PCE	372	SW8260B	5

<sup>1</sup> = All other Volatile Organic Compounds were Non-Detectable

<sup>2</sup> = Groundwater Cleanup levels based on 18AAC 75.345 Table C.

**Border** = Concentration exceeds corresponding ADEC cleanup criterion

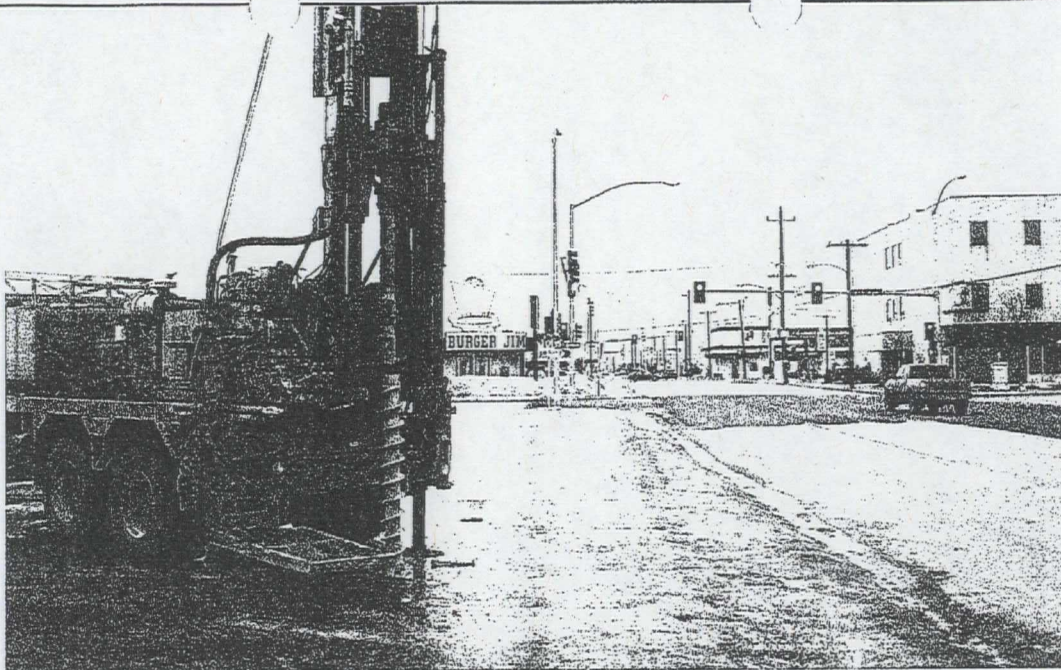
µg/L = Micrograms per Liter

PCE = Tetrachloroethene

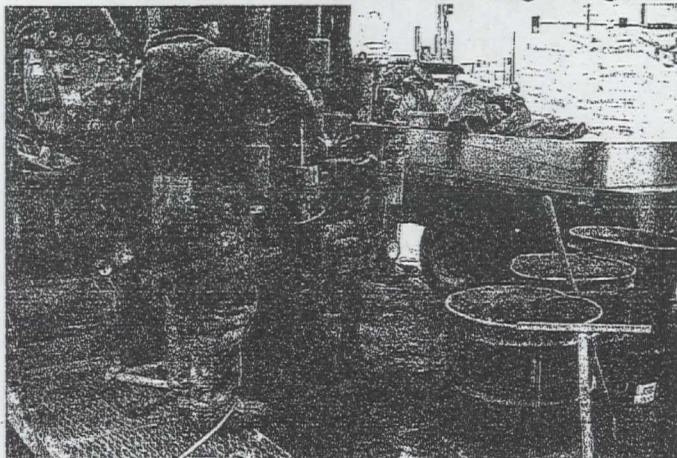
BGES, INC.

**APPENDIX A**  
**PHOTOGRAPHS**

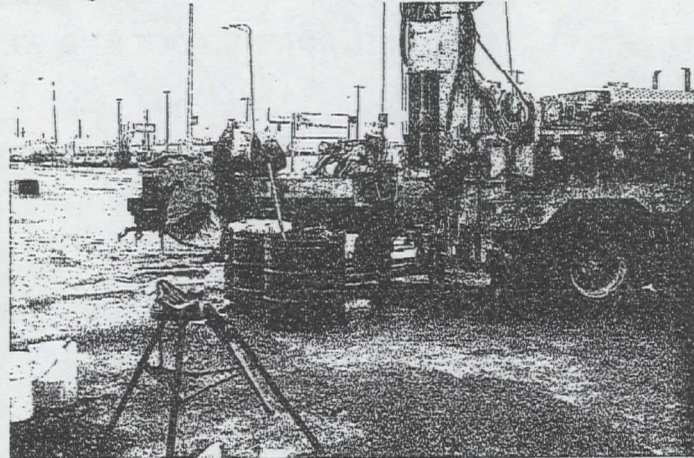




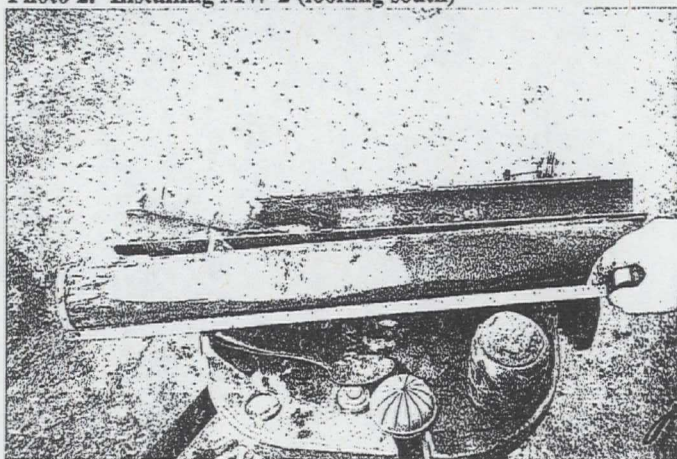
**Photo 1. Advancing Boring MW-2 (looking south)**



**Photo 2. Installing MW-2 (looking south)**



**Photo 3. Advancing Boring MW-4 (looking southeast)**



**Photo 4. Sand/Clay Contact in Sample S-22 from MW- 2**



**Photo 5. Placing Drums in Storage Area**

**Fourth Avenue And Gambell Street  
Property Photographs**

**BGES, INC.**

**May 2005**

**Figure A-1**



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**APPENDIX B**  
**SOIL BORING LOGS AND WELL CONSTRUCTION DIAGRAMS**

**BGES, INC.**

Environmental Consultants

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SOIL BORING LOG****FOURTH AVENUE AND GAMBELL STREET****BORING NUMBER: MW-2 BORING LOCATION: NW Corner of Property**Date: March 12, 2005 Weather Conditions: Cloudy, Cool (Approximately 38 degrees Fahrenheit)Time: 09:35 Drilling Company/Rig Type: Denali Drilling/CME 85Observer: RNB/KOG Drilling/Sampling Method: Hollow-Stem Auger/Split-Spoon Sampler

Sample No.	DEPTH	PID Spn/Smpl	DESCRIPTION	Blow Counts
N/A	From: 0 to: 2.0 Time: 09:40	—	Drilled – Sand and Gravel; brown	N/A
S-1	From: 2.0 to: 4.0 Time: 9:55	0 0.5	Sand, coarse grained and gravel, subrounded; brown; saturated at top, dry at bottom. 1.5-foot recovery	31-36-31
S-2	From: 4.0 to: 6.0 Time: 10:05	0 8.2	Sand, very fine to fine grained and gravel, subrounded; thin clay layer at 5.7'; brown to light tan; 1.7' recovery	13-32-45-47
S-3	From: 6.0 to: 8.0 Time: 10:12	0 11.8	Sand, medium to coarse grained, and gravel, subrounded to angular; brown to tan; 1.6-foot recovery	16-20-17-16
S-4	From: 8.0 to: 10.0 Time: 10:18	0 6.1	Sand, fine to coarse grained, slightly silty, and gravel, rounded to angular; iron staining at btm.; light brown to tan; 1.6-foot recovery	5-14-14-18
S-5	From: 10.0 to: 12.0 Time: 10:26	0 16.2	Sand, medium grained, some coarse, grained and gravel, rounded to subangular; light brown to tan; moist; 1.5-foot recovery	12-12-12-12
S-6	From: 12.0 to: 14.0 Time: 10:34	0 11.4	Sand, fine to coarse grained, some gravel, angular to subrounded; light brown; charred wood in middle; 1.3-foot recovery	8-9-10-8
S-7	From: 14.0 to: 16.0 Time: 10:37	0 9.6	Sand, coarse grained, trace gravel, rounded; light brown; 1.5-foot recovery	6-6-10-9
S-8	From: 16.0 to: 18.0 Time: 10:48	0 6.1	Sand, fine to coarse grained, and gravel, subrounded; light brown; 1.5-foot recovery	7-12-12-10
S-9	From: 18.0 to: 20.0 Time: 11:05	2.3 57.2	Sand, medium to coarse grained, and gravel, subrounded; charred wood/peat at 19.8 feet	11-12-12-10

Notes: Thermo Environmental Instruments 580 EZ Photoionization Detector.



**BGES, INC.**  
**SOIL BORING LOG**

**FOURTH AVENUE AND GAMBELL STREET**

**BORING NUMBER: MW-2 BORING LOCATION: NW Corner of Property**

Date: March 12, 2005 Weather Conditions: Cloudy, Cool (Approximately 38 degrees Fahrenheit)

Time: 09:35 Drilling Company/Rig Type: Denali Drilling/CME 85

Observer: RNB/KOG Drilling/Sampling Method: Hollow-Stem Auger/Split-Spoon Sampler

Sample No.	DEPTH	PID Spn/Smpl	DESCRIPTION	Blow Counts
S-10	From: 20.0 to: 22.0 Time: 11:13	0 6.0	Sand, fine to coarse grained, trace gravel, angular; light brown; moist; 1.7-foot recovery	9-15-15-5
S-11	From: 22.0 to: 24.0 Time: 11:22	0 11.5	Sand, medium grained, trace coarse grained, trace gravel; light brown; moist; 1.8-foot recovery	8-11-13-16
S-12	From: 24.0 to: 26.0 Time: 11:30	0 4.2	Gravel, angular, and coarse sand; light brown; moist; 1.6' recovery	8-15-20-20
S-13	From: 26.0 to: 28.0 Time: 10:36	0 11.5	Sand, coarse grained, trace gravel, rounded to subrounded; brown; black streak (organics) at 27.7'; 1.6' recovery	11-13-12-11
S-14	From: 28.0 to: 30.0 Time: 11:44	0 115	Sand, medium to coarse grained; light brown; 3-inch thick peat layer at 29.2 feet; 1.6-foot recovery	8-8-13-12
S-15	From: 30.0 to: 32.0 Time: 11:53	12.7 38.4	Sand, fine to coarse grained; light brown; 1.7-foot recovery	11-11-14-15
S-16	From: 32.0 to: 34.0 Time: 12:01	0.8 6.1	Sand, fine to medium grained, trace coarse grained; light brown; 1.8-foot recovery	7-11-10-13
S-17	From: 34.0 to: 36.0 Time: 12:21	0.9 20	Sand, fine grained; light brown; 1.6-foot recovery	9-12-12-10
S-18	From: 36.0 to: 38.0 Time: 12:37	0 40	Sand, medium to coarse grained; light grey; moist; trace clay at bottom of spoon, 0.25-inch iron-stained lenses in bottom 11 inches; 1.8-foot recovery	6-11-15-15
S-19	From: 38.0 to: 40.0 Time: 12:50	0 69.1	Sand, coarse grained, dark grey; saturated; some layers of light brown iron staining; 1.9-foot recovery	6-12-11-10

Notes: Thermo Environmental Instruments 580 EZ Photoionization detector.



BGES, INC.  
SOIL BORING LOG

FOURTH AVENUE AND GAMBELL STREET

BORING NUMBER: MW-2 BORING LOCATION: NW Corner of Property

Date: March 12, 2005 Weather Conditions: Cloudy, Cool (Approximately 38 degrees Fahrenheit)

Time: 09:35 Drilling Company/Rig Type: Denali Drilling/CME 85

Observer: BNB/KOG Drilling/Sampling Method: Hollow-Stem Auger/Split-Spoon Sampler

Sample No.	DEPTH	PID Spn/Smpl	DESCRIPTION	Blow Counts
S-20	From: 40.0 to: 42.0 Time: 13:03	0 47.9	Sand, medium grained; grey; saturated; 1.9-foot recovery	3-8-11-15
S-21	From: 42.0 to: 44.0 Time: 13:13	0 49.0	Sand, very fine grained, slightly silty (bottom 4 inches-no silt), grey; saturated	4-10-20-20
S-22	From: 44.0 to: 45.2 Time: 13:33	0 65.4	Sand, coarse grained; grey; saturated	4-5-7-6
S-22	From: 45.2 to: 46.0 Time: 10:36	0 65.4	Clay, dark grey	4-5-7-6
			End of boring - clay	

Notes: Thermo Environmental Instruments 580 EZ Photoionization detector.

**BGES, INC.**  
Environmental Consultants**BGES, INC.**  
**SOIL BORING LOG**

FOURTH AVENUE AND GAMBELL STREET

**BORING NUMBER:** MW-3 **BORING LOCATION:** 89.3 feet east of Gambell Street, near Alley**Date:** March 13, 2005 **Weather Conditions:** Rainy, Cool (Approximately 38 degrees Fahrenheit)**Time:** 08:00 **Drilling Company/Rig Type:** Denali Drilling/CME 85**Observer:** RNB/KOG **Drilling/Sampling Method:** Hollow-Stem Auger/Split-Spoon Sampler

Sample No.	DEPTH	PID Spn/Smpl	DESCRIPTION	Blow Counts
Drilled	From: 0 to: 5.0 Time: 08:24	—	Sand, very fine grained, very silty; dark brown; frozen at the surface; some gravel at 3 feet below grade	N/A
S-1	From: 5.0 to: 7.0 Time: 8:32	— 1.2	Sand, medium to coarse grained and gravel, subrounded to angular; brown; 1.4-foot recovery	10-15-21-31
Drilled	From: 7.0 to: 10.0 Time: 8:36	—	Sand and gravel; brown	N/A
S-2	From: 10.0 to: 12.0 Time: 8:41	— 4.8	Sand, coarse grained, and gravel, subrounded to rounded, slightly silty; brown to light grey; 1.6-foot recovery	7-11-14-16
Drilled	From: 12.0 to: 15.0 Time: 8:45	—	Sand and gravel	N/A
S-3	From: 15.0 to: 17.0 Time: 8:49	— 7.0	Sand, fine to coarse grained, and gravel, subrounded to rounded; brown; 1.4-foot recovery	8-12-14-18
Drilled	From: 17.0 to: 18.0 Time: 8:53	—	Sand and gravel	N/A
S-4	From: 18.0 to: 20.0 Time: 9:00	— 3.7	Sand, very fine to coarse grained, slightly silty, and large gravel, subrounded; light brown to light grey; 1.4-foot recovery	8-16-21-17
S-5	From: 20.0 to: 22.0 Time: 9:06	— 10.1	Sand, medium to coarse grained, and gravel, angular to subrounded; brown; 1.5-foot recovery	7-14-19-22
S-6	From: 22.0 to: 24.0 Time: 9:15	— 3.8	Sand, fine to medium grained, and gravel, angular to subrounded; brown; 1.4-foot recovery	7-19-19-19

**Notes:** Thermo Environmental Instruments 580 EZ Photoionization detector.



**BGES, INC.**

Environmental Consultants

**BGES, INC.  
SOIL BORING LOG****FOURTH AVENUE AND GAMBELL STREET****BORING NUMBER: MW-3 BORING LOCATION: 89.3 feet east of Gambell Street, near Alley****Date: March 13, 2005 Weather Conditions: Rainy, Cool (Approximately 38 degrees Fahrenheit)****Time: 08:00 Drilling Company/Rig Type: Denali Drilling/CME 85****Observer: RNB/KOG Drilling/Sampling Method: Hollow-Stem Auger/Split-Spoon Sampler**

Sample No.	DEPTH	PID Spn/Smpl	DESCRIPTION	Blow Counts
S-7	From: 24.0 to: 26.0 Time: 9:23	— 6.8	Sand, medium to coarse grained, some gravel, subrounded to rounded; brown; 1/8-inch peat layer at 25.8'; 1.6-foot recovery	9-15-14-13
S-8	From: 26.0 to: 28.0 Time: 9:34	— 16.0	Sand, medium to coarse grained (top 0.7 foot), then fine grained, some gravel, subrounded; brown; 1.6-foot recovery	10-19-13-19
S-9	From: 28.0 to: 30.0 Time: 9:43	— F1.4	Sand, fine grained, trace coarse sand, some gravel, subrounded; brown; 1.6-foot recovery	8-16-16-20
S-10	From: 30.0 to: 32.0 Time: 9:51	— 6.3	Sand, medium to coarse grained, trace gravel, subrounded; moist; brown; 1.7-foot recovery	9-13-16-15
S-11	From: 32.0 to: 34.0 Time: 10:12	— 16.0	Sand, fine to coarse grained, some gravel, subrounded to rounded; dry; light brown; 1.6-foot recovery	6-13-15-12
S-12	From: 34.0 to: 36.0 Time: 10:21	— 5.5	Sand, very fine to medium grained, some coarse grained; dry; light brown; 1.6-foot recovery	5-11-11-15
S-13	From: 36.0 to: 38.0 Time: 10:35	— 11.3	Sand, medium grained; dry; light brown; 1.5-foot recovery	5-11-13-15
S-14	From: 38.0 to: 40.0 Time: 10:45	— 3.8	Sand, medium grained; moist; light brown to light grey; 2.0-foot recovery	5-11-14-16
S-15	From: 40.0 to: 42.0 Time: 10:54	— 5.6	Sand, medium grained; saturated; light grey; 1.6-foot recovery	9-10-10-12
S-16	From: 42.0 to: 44.0 Time: 11:05	— 0.0	Sand, fine to medium grained, trace gravel; saturated; grey; brown clay in bottom of spoon; 1.8-foot recovery	6-11-14-12

**Notes: Thermo Environmental Instruments 580 EZ Photoionization detector.**



**BGES, INC.**  
**SOIL BORING LOG**

**FOURTH AVENUE AND GAMBELL STREET**

**BORING NUMBER: MW-3 BORING LOCATION: 89.3 feet east of Gambell Street, near Alley**

Date: March 13, 2005 Weather Conditions: Rainy, Cool (Approximately 38 degrees Fahrenheit)

Time: 08:00 Drilling Company/Rig Type: Denali Drilling/CME 85

Observer: RNB/KOG Drilling/Sampling Method: Hollow-Stem Auger/Split-Spoon Sampler

Sample No.	DEPTH	PID Spn/Smpl	DESCRIPTION	Blow Counts
S-17	From: 44.0 to: 46.0 Time: 11:17	— 0.0	Sand, medium to coarse grained; saturated; grey; 1.9-foot recovery	6-13-17-20
S-18	From: 46.0 to: 47.3 Time: 11:36	— 7.1	Sand, fine grained; saturated; grey;	3-3-8-22
S-18	From: 47.3 to: 47.6 Time: 11:36	— 7.1	Clay; grey	3-3-8-22
S-18	From: 47.6 to: 48.0 Time: 11:36	— 7.1	Sand, very fine grained, silty; saturated; grey	3-3-8-22
			End of Boring – 0.3-foot clay layer at 47.3 feet	

Notes: Thermo Environmental Instruments 580 EZ Photoionization detector.



**BGES, INC.**  
**SOIL BORING LOG**

**FOURTH AVENUE AND GAMBELL STREET**

**BORING NUMBER: MW-4 BORING LOCATION: 62.0 feet east of Gambell Street, near 4<sup>th</sup> Ave.**

**Date: March 13, 2005 Weather Conditions: Rainy, Cool (Approximately 36 degrees Fahrenheit)**

**Time: 13:15 Drilling Company/Rig Type: Denali Drilling/CME 85**

**Observer: RNB/KOG Drilling/Sampling Method: Hollow-Stem Auger/Split-Spoon Sampler**

Sample No.	DEPTH	PID Spn/Smpl	DESCRIPTION	Blow Counts
Drilled	From: 0 to: 5.0 Time: 13:23	—	Sand and gravel, angular to subrounded; brown	N/A
S-1	From: 5.0 to: 7.0 Time: 13:40	— 0.0	Sand, fine to coarse grained (clay at top 0.3 foot), and gravel, subrounded; 2.0-foot recovery	10-13-18-16
Drilled	From: 7.0 to: 10.0 Time: 13:45	—	Sand and gravel; brown	N/A
S-2	From: 10.0 to: 12.0 Time: 13:47	— 2.8	Sand, very fine to coarse grained, silty, and few large pieces of gravel, subrounded; brown; black organic layer at 11.0-11.2 feet; 1.6-foot recovery	11-14-16-14
Drilled	From: 12.0 to: 15.0 Time: 13:50	—	Sand and gravel; brown	N/A
S-3	From: 15.0 to: 17.0 Time: 13:52	— 0.2	Sand, coarse grained, and gravel, rounded to subrounded; brown; 1.7-foot recovery	6-11-13-15
Drilled	From: 17.0 to: 18.0 Time: 13:54	—	Sand and gravel; brown	N/A
S-4	From: 18.0 to: 20.0 Time: 13:59	— 55.9	Sand, coarse grained, and gravel, subrounded; brown; black organics at 19.5-19.7 feet; 1.5-foot recovery	6-5-11-15
S-5	From: 20.0 to: 22.0 Time: 14:05	— 0.0	Sand, coarse grained, and gravel, subrounded; light brown; 1.7-foot recovery	10-13-19-23
S-6	From: 22.0 to: 24.0 Time: 14:12	— 16.4	Sand, fine to coarse grained, and gravel, subrounded; light brown; 1.6-foot recovery	9-15-16-18

**Notes: Thermo Environmental Instruments 580 EZ Photoionization detector.**



BGES, INC.  
SOIL BORING LOG

FOURTH AVENUE AND GAMBELL STREET

BORING NUMBER: MW-4 BORING LOCATION: 62.0 feet east of Gambell Street, near 4<sup>th</sup> Ave.

Date: March 13, 2005 Weather Conditions: Rainy, Cool (Approximately 38 degrees Fahrenheit)

Time: 13:15 Drilling Company/Rig Type: Denali Drilling/CME 85

Observer: RNB/KOG Drilling/Sampling Method: Hollow-Stem Auger/Split-Spoon Sampler

Sample No.	DEPTH	PID Spn/Smpl	DESCRIPTION	Blow Counts
S-7	From: 24.0 to: 26.0 Time: 14:17	— 17.1	Sand, fine to medium grained, and gravel, subrounded; brown; 0.1-foot black organic layer at 25.8 feet	7-11-10-12
S-8	From: 26.0 to: 28.0 Time: 14:25	— 9.3	Sand, coarse grained, and gravel, subrounded; brown to light brown; black peat layer at 27.1 feet;	7-12-16-17
S-9	From: 28.0 to: 30.0 Time: 14:37	— 0.0	Sand, coarse grained, slightly silty, some gravel, angular; light brown; 1.4-foot recovery	10-12-17-18
S-10	From: 30.0 to: 32.0 Time: 14:44	— 0.0	Sand, coarse grained, some gravel, subrounded; light brown; (31.7 to 32 feet – Sand, fine grained; light brown) 1.4-foot recovery	11-15-11-12
S-11	From: 32.0 to: 34.0 Time: 14:53	— 1.1	Sand, medium grained; light brown; 1.4-foot recovery	8-8-10-15
S-12	From: 34.0 to: 36.0 Time: 15:00	— 0.0	Sand, very fine to coarse grained; light brown; 1.5-foot recovery	10-13-15-16
S-13	From: 36.0 to: 38.0 Time: 15:10	— 3.7	Sand, fine grained; moist at bottom; brown; 1.7-foot recovery	7-11-13-14
S-14	From: 38.0 to: 40.0 Time: 15:19	— 0.0	Sand, fine grained; moist; dark grey; 1.8-foot recovery	8-9-10-11
S-15	From: 40.0 to: 41.0 Time: 15:27	— 0.0	Sand, fine grained; saturated; grey; 2.0-foot recovery	4-9-11-16
S-15	From: 41.0 to: 41.4 Time: 15:27	— 0.0	Sand, very fine grained, slightly silty; saturated; grey; 2.0-foot recovery	4-9-11-16

Notes: Thermo Environmental Instruments 580 EZ Photoionization detector.

**BGES, INC.**  
Environmental Consultants**BGES, INC.**  
**SOIL BORING LOG****FOURTH AVENUE AND GAMBELL STREET****BORING NUMBER: MW-4 BORING LOCATION: 62.0 feet east of Gambell Street, near 4<sup>th</sup> Ave.**Date: March 13, 2005 Weather Conditions: Rainy, Cool (Approximately 38 degrees Fahrenheit)Time: 13:15 Drilling Company/Rig Type: Denali Drilling/CME 85Observer: RNB/KOG Drilling/Sampling Method: Hollow-Stem Auger/Split-Spoon Sampler

Sample No.	DEPTH	PID Spn/Smpl	DESCRIPTION	Blow Counts
S-15	From: 41.4 to: 42.0 Time: 15:27	— 0.0	Sand, medium to coarse grained; saturated; grey; 2.0-foot recovery	4-9-11-16
S-16	From: 42.0 to: 43.2 Time: 15:40	— 0.0	Sand, coarse grained; saturated; grey	4-7-13-21
S-16	From: 43.2 to: 44.0 Time: 15:40	— 0.0	Sand, very fine grained; saturated; grey; very thin brown lens at 43.6 feet	4-7-13-21
S-17	From: 44.0 to: 46.0 Time: 15:52	— 0.0	Sand, very fine grained, silty; saturated; dark grey; 2.0-foot recovery	7-12-17-26
S-18	From: 46.0 to: 46.9 Time: 16:08	— 0.0	Sand, medium grained; saturated; brown	3-2-4-9
S-18	From: 46.9 to: 48.0 Time: 16:08	— 0.0	Clay; grey	3-2-4-9
			End of Boring – clay layer at 46.9 feet	

Notes: Thermo Environmental Instruments 580 EZ Photoionization detector.



BGES, INC.  
WELL CONSTRUCTION DIAGRAM

FOURTH AVENUE AND GAMBELL STREET

WELL NUMBER: MW-2

Date: 3/12/05

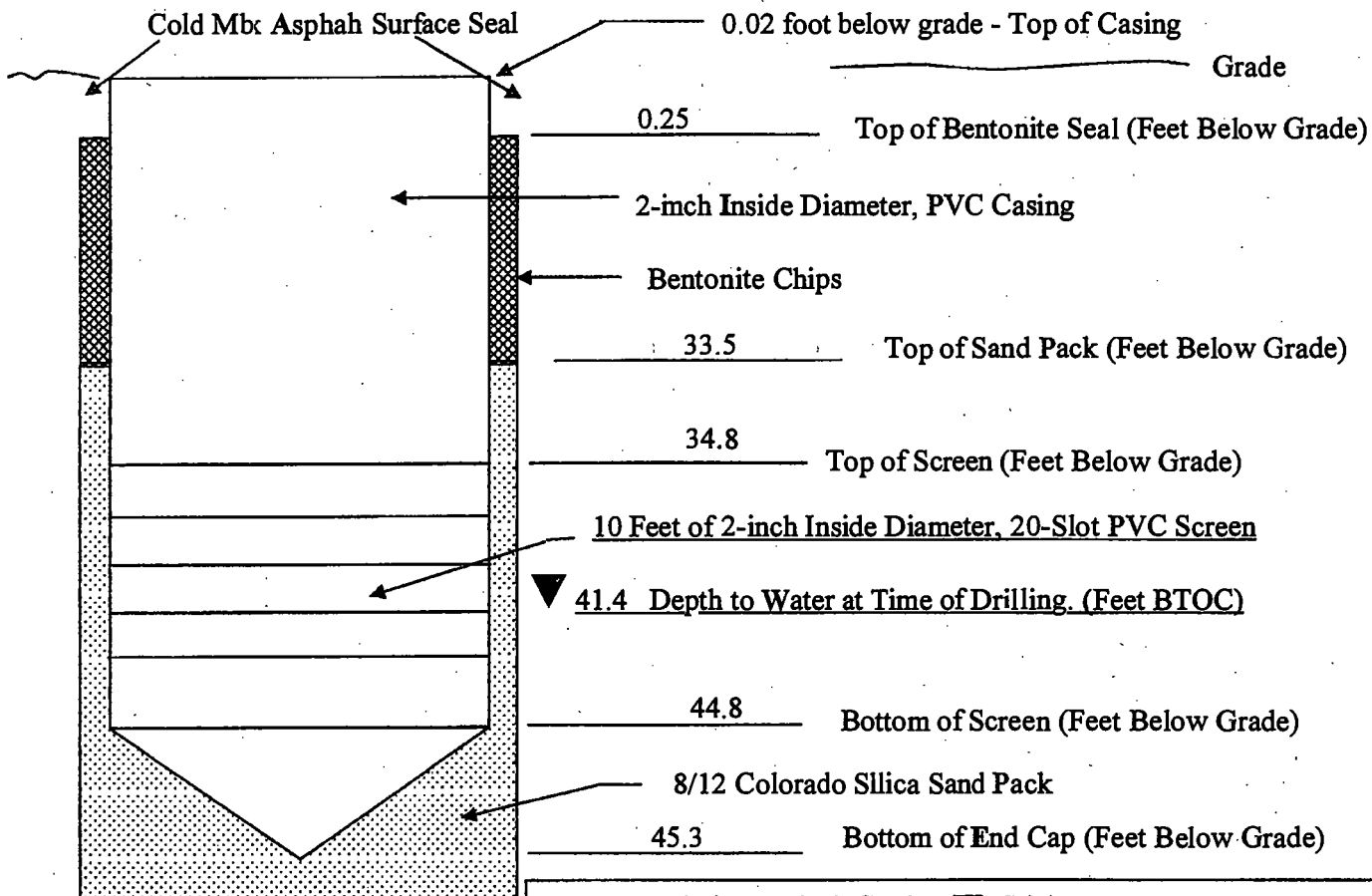
Weather Conditions: Cloudy and cool, about 45°F

Time: 13:45

Drilling Company/Rig Type: Denali Drilling, Truck-Mounted CME 85

Observer: RNB/KOG

Drilling/Sampling Method: Hollow Stem Auger/ Split-spoon



Well Completion – Flush Grade ☒ Stickup ☐

TOC Elevation: 98.87\* Total Well Depth (Ft. BTOC): 45.3

Notes: Drawing not to scale. TOC = Top Of Casing BTOC = Below Top Of Casing

TOC = 0.02 foot below grade.

\* TOC elevation based on reference point (base of telephone pole) assumed to be 100 feet.

Seven Bags of Sand were used



BGES, INC.  
WELL CONSTRUCTION DIAGRAM

FOURTH AVENUE AND GAMBELL STREET

WELL NUMBER: MW-3

Date: 3/13/05

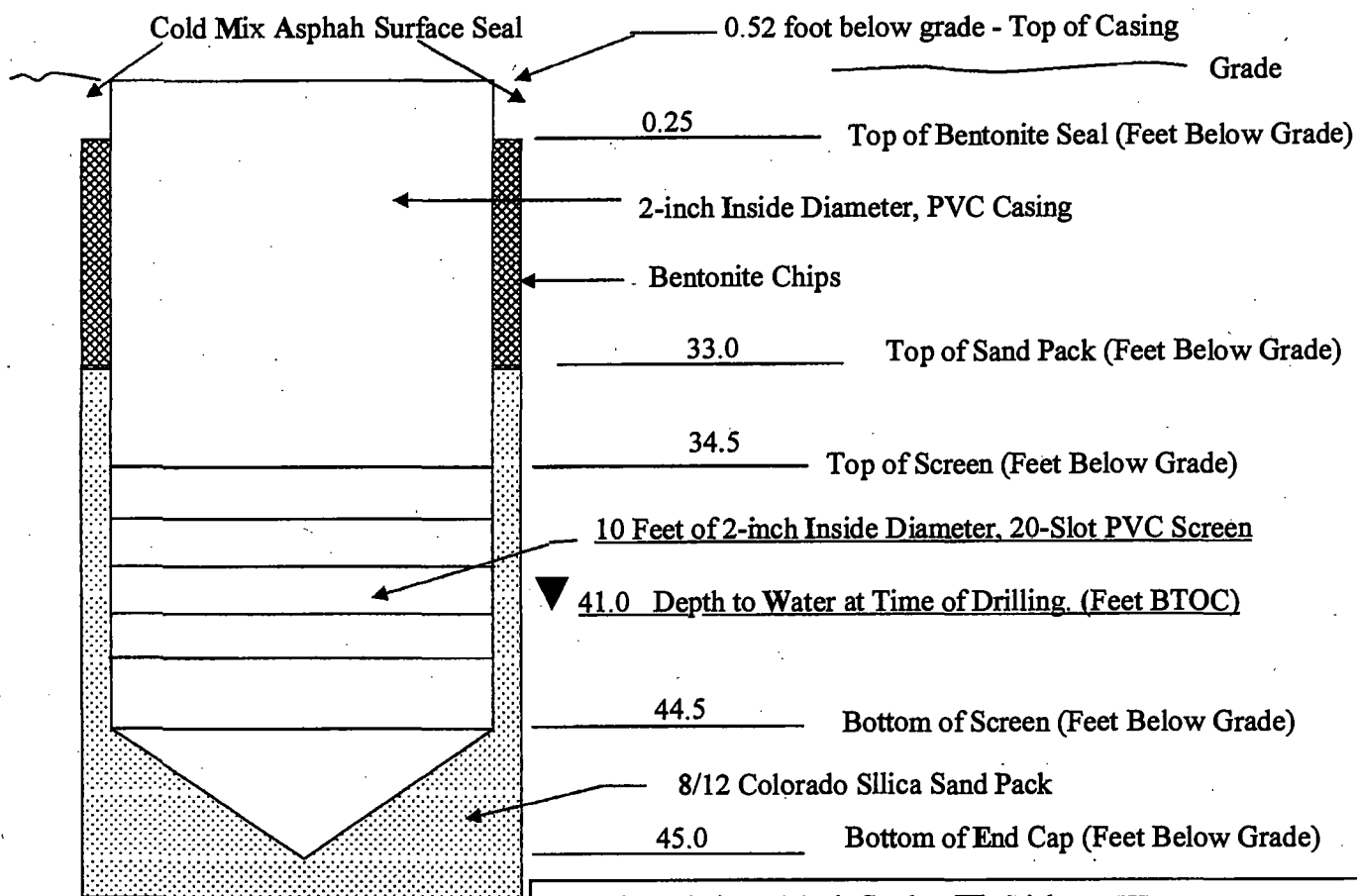
Weather Conditions: Rainy and cool, about 38°F

Time: 11:45

Drilling Company/Rig Type: Denali Drilling, Truck-Mounted CME 85

Observer: RNB/KOG

Drilling/Sampling Method: Hollow Stem Auger/ Split-spoon



Well Completion - Flush Grade ☒ Stickup ☐

TOC Elevation: 99.78\* Total Well Depth (Ft. BTOC): 45.0

Notes: Drawing not to scale. TOC = Top Of Casing BTOC = Below Top Of Casing

TOC = 0.52 foot below grade.

\* TOC elevation based on reference point (base of telephone pole) assumed to be 100 feet.

Seven Bags of Sand were used



BGES, INC.  
WELL CONSTRUCTION DIAGRAM  
FOURTH AVENUE AND GAMBELL STREET

WELL NUMBER: MW-4

Date: 3/13/05

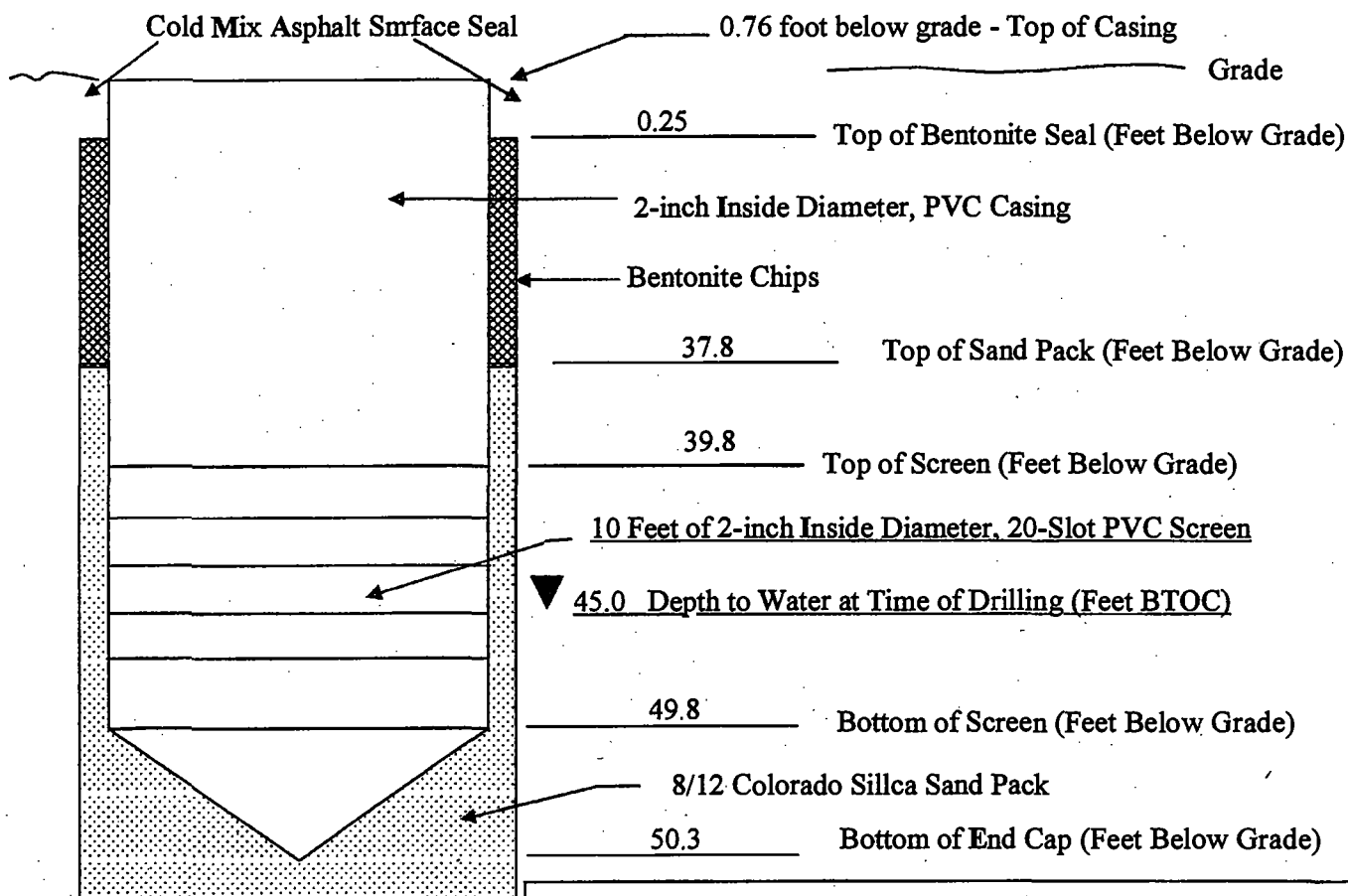
Weather Conditions: Rainy and cool, about 38°F

Time: 16:15

Drilling Company/Rig Type: Denali Drilling, Truck-Mounted CME 85

Observer: RNB/KOG

Drilling/Sampling Method: Hollow Stem Auger/ Split-spoon



Well Completion - Flush Grade ☒ Stickup ☐

TOC Elevation: 99.23\* Total Well Depth (Ft. BTOC): 50.3

Notes: Drawing not to scale. TOC = Top Of Casing BTOC = Below Top Of Casing

TOC = 0.76 foot below grade.

\* TOC elevation based on reference point (base of telephone pole) assumed to be 100 feet.

Seven Bags of Sand were used



**APPENDIX C**  
**WATER MONITORING LOGS**

**BGES, INC.**  
**WATER MONITORING LOG**  
**FOURTH AVENUE AND GAMBELL STREET**

**Well Number MW-1**

Time Arrived On Site: 13:20  
 Date of Depth to Water Measurement: April 6, 2005

Weather Conditions: Partly Sunny, Mild 45°F  
 Time of Depth to Water Measurement: 13:55

Top of Casing Elevation:  
 Depth to Water (feet below top of casing):  
 Water Elevation:

99.67  
38.90  
60.77

Type of Sampling Equipment:  
Disposable Polyethylene Bailer  
Horiba U-22

Total Depth of Well (feet below top of casing):  
 Depth to Water (feet below top of casing):  
 Water Column (feet):

46  
38.9  
6.1

Volume of well (gallons)

1.00

=0.0638 X Water Column (For 1 1/4-inch well)  
 =0.1632 X Water Column (For 2-inch well)  
 =0.6528 X Water Column (For 4-inch well)  
 =1.4688 X Water Column (For 6-inch well)

Time Purging Began:

17:02

Time of Sampling:

17:57

Volume purged:

3 gallons

pH  
 Conductivity - mlll siemens per centimeter (ms/cm)  
 Turbidity - Nephelometric Turbidity Units (NTUs)  
 Dissolved Oxygen - grams per liter (g/l)  
 Temperature - degrees Celsius (°C)  
 Salinity - percent (%)  
 TDS (g/l)  
 Oxidation Reduction Potential (ORP) - millivolts (mv)

5.55  
0.006  
180  
13.29  
9.31  
0.0  
0.004  
277

VOLUME  
 ONE

pH  
 Conductivity (ms/cm)  
 Turbidity (NTUs)  
 Dissolved Oxygen (g/l)  
 Temperature (°C)  
 Salinity (%)  
 TDS (g/l)  
 ORP (mv)

6.49  
0.625  
74  
10.88  
7.34  
0.0  
0.401  
288

VOLUME  
 FOUR

pH  
 Conductivity (ms/cm)  
 Turbidity (NTUs)  
 Dissolved Oxygen (g/l)  
 Temperature (°C)  
 Salinity (%)  
 TDS (g/l)  
 ORP (mv)

6.29  
0.662  
150  
13.22  
8.4  
0  
0.423  
286

VOLUME  
 TWO

pH  
 Conductivity (ms/cm)  
 Turbidity (NTUs)  
 Dissolved Oxygen (g/l)  
 Temperature (°C)  
 Salinity (%)  
 TDS (g/l)  
 ORP (mv)

6.49  
0.625  
74  
10.88  
7.34  
0.0  
0.401  
288

VOLUME  
 FIVE

pH  
 Conductivity (ms/cm)  
 Turbidity (NTUs)  
 Dissolved Oxygen (g/l)  
 Temperature (°C)  
 Salinity (%)  
 TDS (g/l)  
 ORP (mv)

6.40  
0.642  
120  
12.13  
8.01  
0  
0.413  
291

VOLUME  
 THREE

pH  
 Conductivity (ms/cm)  
 Turbidity (NTUs)  
 Dissolved Oxygen (g/l)  
 Temperature (°C)  
 Salinity (%)  
 TDS (g/l)  
 ORP (mv)

6.40  
0.642  
120  
12.13  
8.01  
0  
0.413  
291

VOLUME  
 SIX

Notes: The well recovered relatively slowly.

**BGES, INC.**  
**WATER MONITORING LOG**  
**FOURTH AVENUE AND GAMBELL STREET**

**Well Number MW-2**

Time Arrived On Site: 13:20  
 Date of Depth to Water Measurement: April 6, 2005

Weather Conditions: Partly Sunny, Mild 45°F  
 Time of Depth to Water Measurement: 14:10

Top of Casing Elevation:  
 Depth to Water (feet below top of casing):  
 Water Elevation:

98.87  
37.84  
61.03

Type of Sampling Equipment:  
Disposable Polyethylene Bailer  
Horiba U-22

Total Depth of Well (feet below top of casing):  
 Depth to Water (feet below top of casing):  
 Water Column (feet):

45.3  
37.84  
7.46

Volume of well (gallons)

1.22

=0.0638 X Water Column (For 1 1/4-inch well)  
 =0.1632 X Water Column (For 2-inch well)  
 =0.6528 X Water Column (For 4-inch well)  
 =1.4688 X Water Column (For 6-inch well)

Time Purging Began: 17:02  
 Time of Sampling: 17:57  
 Volume purged: 5 gallons

pH 6.41  
 Conductivity - milli siemens per centimeter (ms/cm) 0.682  
 Turbidity - Nephelometric Turbidity Units (NTUs) 160  
 Dissolved Oxygen - grams per liter (g/l) 12.19  
 Temperature - degrees Celsius (°C) 8.47  
 Salinity - percent (%) 0.0  
 TDS (g/l) 0.438  
 Oxidation Reduction Potential (ORP) - millivolts (mv) 0

VOLUME  
 ONE

pH \_\_\_\_\_  
 Conductivity (ms/cm) \_\_\_\_\_  
 Turbidity (NTUs) \_\_\_\_\_  
 Dissolved Oxygen (g/l) \_\_\_\_\_  
 Temperature (°C) \_\_\_\_\_  
 Salinity (%) \_\_\_\_\_  
 TDS (g/l) \_\_\_\_\_  
 ORP (mv) \_\_\_\_\_

VOLUME  
 FOUR

pH 6.42  
 Conductivity (ms/cm) 0.005  
 Turbidity (NTUs) 780  
 Dissolved Oxygen (g/l) 12.30  
 Temperature (°C) 8.14  
 Salinity (%) 0  
 TDS (g/l) 0.003  
 ORP (mv) 278

VOLUME  
 TWO

pH \_\_\_\_\_  
 Conductivity (ms/cm) \_\_\_\_\_  
 Turbidity (NTUs) \_\_\_\_\_  
 Dissolved Oxygen (g/l) \_\_\_\_\_  
 Temperature (°C) \_\_\_\_\_  
 Salinity (%) \_\_\_\_\_  
 TDS (g/l) \_\_\_\_\_  
 ORP (mv) \_\_\_\_\_

VOLUME  
 FIVE

pH \_\_\_\_\_  
 Conductivity (ms/cm) \_\_\_\_\_  
 Turbidity (NTUs) \_\_\_\_\_  
 Dissolved Oxygen (g/l) \_\_\_\_\_  
 Temperature (°C) \_\_\_\_\_  
 Salinity (%) \_\_\_\_\_  
 TDS (g/l) \_\_\_\_\_  
 ORP (mv) \_\_\_\_\_

VOLUME  
 THREE

pH \_\_\_\_\_  
 Conductivity (ms/cm) \_\_\_\_\_  
 Turbidity (NTUs) \_\_\_\_\_  
 Dissolved Oxygen (g/l) \_\_\_\_\_  
 Temperature (°C) \_\_\_\_\_  
 Salinity (%) \_\_\_\_\_  
 TDS (g/l) \_\_\_\_\_  
 ORP (mv) \_\_\_\_\_

VOLUME  
 SIX

Notes: Well was sampled following development. The well recovered relatively slowly.

BGES, INC.  
WATER MONITORING LOG  
FOURTH AVENUE AND GAMBELL STREET

**Well Number MW-3**

Time Arrived On Site: 13:20  
Date of Depth to Water Measurement: April 6, 2005

Weather Conditions: Partly Sunny, Mild 45°F  
Time of Depth to Water Measurement: 14:00

Top of Casing Elevation:  
Depth to Water (feet below top of casing):  
Water Elevation:

99.78  
39.44  
60.34

Type of Sampling Equipment:  
Disposable Polyethylene Bailer  
Horiba U-22

Total Depth of Well (feet below top of casing):  
Depth to Water (feet below top of casing):  
Water Column (feet):

45.0  
39.44  
5.56

Volume of well (gallons)

0.91

=0.0638 X Water Column (For 1 1/4-inch well)  
=0.1632 X Water Column (For 2-inch well)  
=0.6528 X Water Column (For 4-inch well)  
=1.4688 X Water Column (For 6-inch well)

Time Purging Began: 17:45  
Time of Sampling: 18:39  
Volume purged: 5 gallons

pH 6.55  
Conductivity - milli siemens per centimeter (ms/cm) 0.554  
Turbidity - Nephelometric Turbidity Units (NTUs) 480  
Dissolved Oxygen - grams per liter (g/l) 8.45  
Temperature - degrees Celsius (°C) 7.4  
Salinity - percent (%) 0  
TDS (g/l) 0.354  
Oxidation Reduction Potential (ORP) - millivolts (mv) 283

VOLUME  
ONE

pH \_\_\_\_\_  
Conductivity (ms/cm) \_\_\_\_\_  
Turbidity (NTUs) \_\_\_\_\_  
Dissolved Oxygen (g/l) \_\_\_\_\_  
Temperature (°C) \_\_\_\_\_  
Salinity (%) \_\_\_\_\_  
TDS (g/l) \_\_\_\_\_  
ORP (mv) \_\_\_\_\_

VOLUME  
FOUR

pH \_\_\_\_\_  
Conductivity (ms/cm) \_\_\_\_\_  
Turbidity (NTUs) \_\_\_\_\_  
Dissolved Oxygen (g/l) \_\_\_\_\_  
Temperature (°C) \_\_\_\_\_  
Salinity (%) \_\_\_\_\_  
TDS (g/l) \_\_\_\_\_  
ORP (mv) \_\_\_\_\_

VOLUME  
TWO

pH \_\_\_\_\_  
Conductivity (ms/cm) \_\_\_\_\_  
Turbidity (NTUs) \_\_\_\_\_  
Dissolved Oxygen (g/l) \_\_\_\_\_  
Temperature (°C) \_\_\_\_\_  
Salinity (%) \_\_\_\_\_  
TDS (g/l) \_\_\_\_\_  
ORP (mv) \_\_\_\_\_

VOLUME  
FIVE

pH \_\_\_\_\_  
Conductivity (ms/cm) \_\_\_\_\_  
Turbidity (NTUs) \_\_\_\_\_  
Dissolved Oxygen (g/l) \_\_\_\_\_  
Temperature (°C) \_\_\_\_\_  
Salinity (%) \_\_\_\_\_  
TDS (g/l) \_\_\_\_\_  
ORP (mv) \_\_\_\_\_

VOLUME  
THREE

pH \_\_\_\_\_  
Conductivity (ms/cm) \_\_\_\_\_  
Turbidity (NTUs) \_\_\_\_\_  
Dissolved Oxygen (g/l) \_\_\_\_\_  
Temperature (°C) \_\_\_\_\_  
Salinity (%) \_\_\_\_\_  
TDS (g/l) \_\_\_\_\_  
ORP (mv) \_\_\_\_\_

VOLUME  
SIX

Notes: Well was sampled following development. The well recovered relatively slowly.

**BGES, INC.**  
**WATER MONITORING LOG**  
**FOURTH AVENUE AND GAMBELL STREET**

**Well Number MW-4**

Time Arrived On Site: 13:20  
 Date of Depth to Water Measurement: April 6, 2005

Weather Conditions: Partly Sunny, Mild 45°F  
 Time of Depth to Water Measurement: 15:42

Top of Casing Elevation:	99.23	Type of Sampling Equipment:
Depth to Water (feet below top of casing):	37.95	Disposable Polyethylene Bailer
Water Elevation:	61.28	Horiba U-22

Total Depth of Well (feet below top of casing):	50.3
Depth to Water (feet below top of casing):	37.95
Water Column (feet):	12.35

Volume of well (gallons)	2.02
--------------------------	------

=0.0638 X Water Column (For 1 1/4-inch well)  
 =0.1632 X Water Column (For 2-inch well)  
 =0.6528 X Water Column (For 4-inch well)  
 =1.4688 X Water Column (For 6-inch well)

Time Purging Began: 18:30  
 Time of Sampling: 19:15  
 Volume purged: 5 gallons

pH 6.44  
 Conductivity - milli siemens per centimeter (ms/cm) 0.004  
 Turbidity - Nephelometric Turbidity Units (NTUs) 560  
 Dissolved Oxygen - grams per liter (g/l) 11.58  
 Temperature - degrees Celsius (°C) 7.87  
 Salinity - percent (%) 0  
 TDS (g/l) 0.003  
 Oxidation Reduction Potential (ORP) - millivolts (mv) 302

VOLUME  
ONE

pH \_\_\_\_\_  
 Conductivity (ms/cm) \_\_\_\_\_  
 Turbidity (NTUs) \_\_\_\_\_  
 Dissolved Oxygen (g/l) \_\_\_\_\_  
 Temperature (°C) \_\_\_\_\_  
 Salinity (%) \_\_\_\_\_  
 TDS (g/l) \_\_\_\_\_  
 ORP (mv) \_\_\_\_\_

VOLUME  
FOUR

pH \_\_\_\_\_  
 Conductivity (ms/cm) \_\_\_\_\_  
 Turbidity (NTUs) \_\_\_\_\_  
 Dissolved Oxygen (g/l) \_\_\_\_\_  
 Temperature (°C) \_\_\_\_\_  
 Salinity (%) \_\_\_\_\_  
 TDS (g/l) \_\_\_\_\_  
 ORP (mv) \_\_\_\_\_

VOLUME  
TWO

pH \_\_\_\_\_  
 Conductivity (ms/cm) \_\_\_\_\_  
 Turbidity (NTUs) \_\_\_\_\_  
 Dissolved Oxygen (g/l) \_\_\_\_\_  
 Temperature (°C) \_\_\_\_\_  
 Salinity (%) \_\_\_\_\_  
 TDS (g/l) \_\_\_\_\_  
 ORP (mv) \_\_\_\_\_

VOLUME  
FIVE

pH \_\_\_\_\_  
 Conductivity (ms/cm) \_\_\_\_\_  
 Turbidity (NTUs) \_\_\_\_\_  
 Dissolved Oxygen (g/l) \_\_\_\_\_  
 Temperature (°C) \_\_\_\_\_  
 Salinity (%) \_\_\_\_\_  
 TDS (g/l) \_\_\_\_\_  
 ORP (mv) \_\_\_\_\_

VOLUME  
THREE

pH \_\_\_\_\_  
 Conductivity (ms/cm) \_\_\_\_\_  
 Turbidity (NTUs) \_\_\_\_\_  
 Dissolved Oxygen (g/l) \_\_\_\_\_  
 Temperature (°C) \_\_\_\_\_  
 Salinity (%) \_\_\_\_\_  
 TDS (g/l) \_\_\_\_\_  
 ORP (mv) \_\_\_\_\_

VOLUME  
SIX

Notes: Well was sampled following development. The well recovered relatively slowly.

BGES, INC.

**APPENDIX D**  
**LABORATORY ANALYTICAL DATA**

**SGS Environmental Services Inc.**  
**Alaska Division**  
**Level 2 Laboratory Data Report**

Project: 4th & Gambell  
Client: BGES Inc.  
SGS Work Order: 1051337

Released by: (Signature) Shane Poster  
(Printed Name) Shane Poster  
(Title) Asst Tech Dir / PM  
(Date) 3-24-05

**Contents:**

Case Narrative  
Chain of Custody/Sample Rec Form  
Final Report Page  
Quality Control Summary Forms

**Note:**

Unless otherwise noted, all quality assurance/quality control criteria is in compliance with the standards set forth by the proper regulatory authority, the SGS Quality Assurance Program Plan, and the National Environmental Accreditation Conference.

This report contains a total number of 48 pages.



## Case Narrative

**Customer: BGESINC**

**BGES Inc.**

**Project: 1051337**

**4th & Gambell**

**614326 MS**

8260 - MS result for 4-methyl-2-pentanone is biased high and does not meet laboratory QC criteria. This analyte is not detected above the PQL in the original sample.

**614327 MSD**

8260 - MSD results for 4-methyl-2-pentanone and 2-hexanone are biased high and do not meet laboratory QC criteria. These analytes are not detected above the PQL in the original sample.

**614352 CCV**

8260 - CCV results for several analytes are biased high and do not meet laboratory QC criteria. These analytes are not detected above the PQL in any of the associated samples.

**614798 CCV**

8260 - CCV results for several analytes are biased high and do not meet laboratory QC criteria. These analytes are not detected above the PQL in any of the associated samples.

**615035 CCV**

8260 - CCV recoveries for several analytes are biased high and do not meet laboratory QC goals. These analytes were not detected in the associated samples.

**614351 IB**

8260 - IB results for dibromofluoromethane(surr), 1,2-dichloroethane-D4(surr), and toluene-D8(surr) are biased high and do not meet laboratory QC criteria. There are no target analytes detected above the PQL associated with these surrogates.



# SGS

**CHAIN OF CUSTODY RECORD**  
**CT&E Environmental Services Inc**  
Laboratory Division

1051337



onwide  
• Louisiana  
• Michigan  
• West Virginia

ental.com 022871

<b>1</b> CLIENT: <u>BGES, INC</u>					CT&E Reference:					PAGE <u>1</u> OF <u>1</u>				
CONTACT: <u>Keith Guyer</u> PHONE NO: <u>907 644-2900</u>					<div style="display: flex; align-items: center;"><div style="writing-mode: vertical-rl; transform: rotate(180deg);">CONTAINERS</div><div style="margin-left: 10px;">No</div></div>					Preservatives Used				
PROJECT: <u>4th Gambell</u> SITE/PWSID#:										Analysis Required				
REPORTS TO: <u>P.O. Box 110126</u>										<div style="display: flex; align-items: center;"><div style="border: 1px solid black; padding: 5px; transform: rotate(-45deg);">VOCs SWB 200</div><div style="margin-left: 10px;">Method</div></div>				
INVOICE TO: <u>BGES</u> QUOTE #														
P.O. NUMBER <u>04-038-03</u>					FAX NO.: <u>907 644-2901</u>									
<b>2</b>														
LAB NO.	SAMPLE IDENTIFICATION				DATE	TIME	MATRIX							REMARKS
① A:B	MW-2 S-9				3/12	1105	Soil	2	G	X				
②	MW-2 S-14				3/12	1144	Soil	2	G	X				
③	MW-2 S-19				3/12	1250	Soil	2	G	X				
④	MW-3 S-5				3/13	0906	Soil	2	G	X				
⑤	MW-3 S-11				3/13	1012	Soil	2	G	X				
⑥	MW-3 S-18				3/13	1136	Soil	2	G	X				
⑦	MW-4 S-4				3/13	1359	Soil	2	G	X				
⑧	MW-4 S-13				3/13	1510	Soil	2	G	X				
92A	Trip Blank JS													
<b>3</b>														
Collected/Relinquished By: (1) <u>[Signature]</u>					Date	Time	Received By:			Shipping Carrier:			Samples Received Cold? (Circle) YES NO	
Relinquished By: (2)					Date	Time	Received By:			Shipping Ticket No:			Temperature °C: <u>73-1.0</u>	
Relinquished By: (3)					Date	Time	Received By:			Special Deliverable Requirements:			Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT	
Relinquished By: (4)					Date	Time	Received By:			Requested Turnaround Time and Special Instructions:				

Form # F004r14 : 05/17/04

[illegible]**SAMPLE RECEIPT FORM (page 2)****SGS WO#:**

Bottle Totals							17	
---------------	--	--	--	--	--	--	----	--

**Completed by:**

-Date: 3-14-05



## Laboratory Analysis Report

200 W. Potter Drive  
Anchorage, AK 99518-1605  
Tel: (907) 562-2343  
Fax: (907) 561-5301  
Web: <http://www.us.sgs.com>

Keith Guyer  
BGES Inc.  
P.O. Box 110126  
Anchorage, AK 99511

Work Order: 1051337  
4th & Gambell  
Client: BGES Inc.  
Report Date: March 21, 2005

Released by:

Shane Poston

Digitally signed by Shane Poston  
DN: CN = Shane Poston, C = US, OU  
= SGS Anchorage, AK  
Date: 2005.03.22 13:56:35 -05'00'

Enclosed are the analytical results associated with the above workorder.

As required by the state of Alaska and the USEPA, a formal Quality Assurance/Quality Control Program is maintained by SGS. A copy of our Quality Control Manual that outlines this program is available at your request. The laboratory ADEC certification numbers are AK971-05 (DW), UST-005 (CS) and AK00971 (Micro).

Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS Quality Assurance Program Plan and the National Environmental Laboratory Accreditation Conference.

If you have any questions regarding this report or if we can be of any other assistance, please call your SGS Project Manager at (907) 562-2343.

The following descriptors may be found on your report which will serve to further qualify the data.

- PQL Practical Quantitation Limit (reporting limit).
- U Indicates the analyte was analyzed for but not detected.
- F Indicates an estimated value that falls below PQL, but is greater than the MDL.
- J The quantitation is an estimation.
- B Indicates the analyte is found in a blank associated with the sample.
- \* The analyte has exceeded allowable regulatory or control limits.
- GT Greater Than
- D The analyte concentration is the result of a dilution.
- LT Less Than
- ! Surrogate out of control limits.
- Q QC parameter out of acceptance range.
- M A matrix effect was present.
- JL The analyte was positively identified, but the quantitation is a low estimation.
- E The analyte result is high outside of calibrated range.

Note: Soil samples are reported on a dry weight basis unless otherwise specified.



SGS Ref.# 1051337001  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID MW-2 S-9  
Matrix Soil/Solid

All Dates/Times are Alaska Standard Time  
Printed Date/Time 03/21/2005 15:52  
Collected Date/Time 03/12/2005 11:05  
Received Date/Time 03/14/2005 11:34  
Technical Director Stephen C. Ede

Sample Remarks:

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>									
Dichlorodifluoromethane	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Chloromethane	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Vinyl chloride	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Bromomethane	92.4 U	92.4	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Chloroethane	92.4 U	92.4	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Trichlorofluoromethane	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,1-Dichloroethene	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Acetone	231 U	231	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Carbon disulfide	92.4 U	92.4	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Methylene chloride	92.4 U	92.4	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
trans-1,2-Dichloroethene	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
2-Butanone (MEK)	231 U	231	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
2,2-Dichloropropane	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
cis-1,2-Dichloroethene	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,1,1-Trichloroethane	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,1-Dichloroethane	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Bromochloromethane	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Chloroform	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Carbon tetrachloride	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Benzene	12.0 U	12.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,1-Dichloropropene	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,2-Dichloroethane	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Trichloroethene	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,2-Dichloropropane	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Dibromomethane	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Bromodichloromethane	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
2-Chloroethyl Vinyl Ether	92.4 U	92.4	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,1,2-Trichloroethane	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
cis-1,3-Dichloropropene	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
4-Methyl-2-pentanone (MIBK)	231 U	231	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Toluene	46.2 U	46.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
trans-1,3-Dichloropropene	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE



SGS Ref# 1051337001  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID MW-2 S-9  
Matrix Soil/Solid

All Dates/Times are Alaska Standard Time

Printed Date/Time 03/21/2005 15:52  
Collected Date/Time 03/12/2005 11:05  
Received Date/Time 03/14/2005 11:34  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile Gas Chromatoaraphy/Mass Spectroscopy									
Tetrachloroethene	29700	577	ug/Kg	SW8260B	A		03/12/05	03/17/05	TJE
1,3-Dichloropropane	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
2-Hexanone	231 U	231	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Dibromochloromethane	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,1,1,2-Tetrachloroethane	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,2-Dibromoethane	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Chlorobenzene	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Ethylbenzene	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
P & M -Xylene	46.2 U	46.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
o-Xylene	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Styrene	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Bromoform	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Isopropylbenzene (Cumene)	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Bromobenzene	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,2,3-Trichloropropane	46.2 U	46.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
n-Propylbenzene	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,1,2,2-Tetrachloroethane	46.2 U	46.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
2-Chlorotoluene	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
4-Chlorotoluene	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,3,5-Trimethylbenzene	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
tert-Butylbenzene	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,2,4-Trimethylbenzene	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
sec-Butylbenzene	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,3-Dichlorobenzene	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
4-Isopropyltoluene	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,4-Dichlorobenzene	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,2-Dichlorobenzene	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
n-Butylbenzene	23.1 U	23.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,2-Dibromo-3-chloropropane	92.4 U	92.4	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,2,4-Trichlorobenzene	46.2 U	46.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Hexachlorobutadiene	46.2 U	46.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Naphthalene	46.2 U	46.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Methyl-t-butyl ether	37.0 U	37.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,2,3-Trichlorobenzene	46.2 U	46.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE



SGS Ref.# 1051337001  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID MW-2 S-9  
Matrix Soil/Solid

All Dates/Times are Alaska Standard Time

Printed Date/Time 03/21/2005 15:52  
Collected Date/Time 03/12/2005 11:05  
Received Date/Time 03/14/2005 11:34  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	init
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#### Volatile Gas Chromatography/Mass Spectroscopy

##### Surrogates

Dibromofluoromethane <surr>	105	%	SW8260B	A	83-119	03/12/05	03/15/05	TJE
1,2-Dichloroethane-D4 <surr>	110	%	SW8260B	A	83-122	03/12/05	03/15/05	TJE
Toluene-d8 <surr>	104	%	SW8260B	A	87-115	03/12/05	03/15/05	TJE
4-Bromofluorobenzene <surr>	95.2	%	SW8260B	A	46-133	03/12/05	03/15/05	TJE

##### Solids

Total Solids	96.7	%	SM20 2540G	B			03/15/05	JC
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SGS Ref.# 1051337002  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID MW-2 S-14  
Matrix Soil/Solid

All Dates/Times are Alaska Standard Time  
Printed Date/Time 03/21/2005 15:52  
Collected Date/Time 03/12/2005 11:44  
Received Date/Time 03/14/2005 11:34  
Technical Director Stephen C. Ede

Sample Remarks:

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	init
Volatile Gas Chromatography/Mass Spectroscopy									
Dichlorodifluoromethane	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Chloromethane	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Vinyl chloride	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Bromomethane	108 U	108	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Chloroethane	108 U	108	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Trichlorofluoromethane	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,1-Dichloroethene	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Acetone	270 U	270	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Carbon disulfide	108 U	108	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Methylene chloride	108 U	108	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
trans-1,2-Dichloroethene	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
2-Butanone (MEK)	270 U	270	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
2,2-Dichloropropane	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
cis-1,2-Dichloroethene	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,1,1-Trichloroethane	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,1-Dichloroethane	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Bromochloromethane	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Chloroform	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Carbon tetrachloride	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Benzene	14.0 U	14.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,2-Dichloroethane	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,1-Dichloropropene	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Trichloroethene	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,2-Dichloropropane	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Dibromomethane	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Bromodichloromethane	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
2-Chloroethyl Vinyl Ether	108 U	108	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,1,2-Trichloroethane	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
cis-1,3-Dichloropropene	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
4-Methyl-2-pentanone (MIBK)	270 U	270	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Toluene	53.9 U	53.9	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
trans-1,3-Dichloropropene	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE





SGS Ref.# 1051337002  
Client Name BGES Inc.  
Project Name# 4th & Gambell  
Client Sample ID MW-2 S-14  
Matrix Soil/Solid

All Dates/Times are Alaska Standard Time

Printed Date/Time 03/21/2005 15:52  
Collected Date/Time 03/12/2005 11:44  
Received Date/Time 03/14/2005 11:34  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile Gas Chromatography/Mass Spectroscopy									
Tetrachloroethene	79500	1350	ug/Kg	SW8260B	A		03/12/05	03/18/05	TJE
1,3-Dichloropropane	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
2-Hexanone	270 U	270	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Dibromochloromethane	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,2-Dibromoethane	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,1,1,2-Tetrachloroethane	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Chlorobenzene	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Ethylbenzene	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
P & M -Xylene	53.9 U	53.9	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
o-Xylene	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Styrene	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Bromoform	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Isopropylbenzene (Cumene)	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Bromobenzene	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,2,3-Trichloropropane	53.9 U	53.9	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
n-Propylbenzene	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,1,2,2-Tetrachloroethane	53.9 U	53.9	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
2-Chlorotoluene	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
4-Chlorotoluene	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,3,5-Trimethylbenzene	38.0	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
tert-Butylbenzene	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,2,4-Trimethylbenzene	32.6	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
sec-Butylbenzene	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,3-Dichlorobenzene	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
4-Isopropyltoluene	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,4-Dichlorobenzene	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,2-Dichlorobenzene	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
n-Butylbenzene	27.0 U	27.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,2-Dibromo-3-chloropropane	108 U	108	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,2,4-Trichlorobenzene	53.9 U	53.9	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Hexachlorobutadiene	53.9 U	53.9	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Naphthalene	53.9 U	53.9	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Methyl-t-butyl ether	43.1 U	43.1	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,2,3-Trichlorobenzene	53.9 U	53.9	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE



SGS Ref# 1051337002  
Client Name BGES Inc.  
Project Name# 4th & Gambell  
Client Sample ID MW-2 S-14  
Matrix Soil/Solid

All Dates/Times are Alaska Standard Time  
Printed Date/Time 03/21/2005 15:52  
Collected Date/Time 03/12/2005 11:44  
Received Date/Time 03/14/2005 11:34  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
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#### Volatile Gas Chromatography/Mass Spectroscopy

##### Surrogates

Dibromofluoromethane <sur>	109	%	SW8260B	A	83-119	03/12/05	03/15/05	TJE
1,2-Dichloroethane-D4 <sur>	114	%	SW8260B	A	83-122	03/12/05	03/15/05	TJE
Toluene-d8 <sur>	102	%	SW8260B	A	87-115	03/12/05	03/15/05	TJE
4-Bromofluorobenzene <sur>	82.7	%	SW8260B	A	46-133	03/12/05	03/15/05	TJE

##### Solids

Total Solids	97.3	%	SM20 2540G	B			03/15/05	JC
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SGS Ref.# 1051337003  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample JD MW-2 S-19  
Matrix Soil/Solid

All Dates/Times are Alaska Standard Time

Printed Date/Time 03/21/2005 15:52  
Collected Date/Time 03/12/2005 12:50  
Received Date/Time 03/14/2005 11:34  
Technical Director Stephen C. Ede

Sample Remarks:

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile Gas Chromatography/Mass Spectroscopy									
Dichlorodifluoromethane	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Chloromethane	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Vinyl chloride	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Bromomethane	65.0 U	65.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Chloroethane	65.0 U	65.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Trichlorofluoromethane	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,1-Dichloroethene	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Acetone	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Carbon disulfide	65.0 U	65.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Methylene chloride	65.0 U	65.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
trans-1,2-Dichloroethene	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
2-Butanone (MEK)	15.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
2,2-Dichloropropane	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
cis-1,2-Dichloroethene	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,1,1-Trichloroethane	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,1-Dichloroethane	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Bromochloromethane	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Chloroform	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Carbon tetrachloride	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Benzene	8.45 U	8.45	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,1-Dichloropropene	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,2-Dichloroethane	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Trichloroethene	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,2-Dichloropropane	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Dibromomethane	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Bromodichloromethane	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
2-Chloroethyl Vinyl Ether	65.0 U	65.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,1,2-Trichloroethane	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
cis-1,3-Dichloropropene	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
4-Methyl-2-pentanone (MIBK)	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Toluene	32.5 U	32.5	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
trans-1,3-Dichloropropene	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE



SGS Ref.# 1051337003  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID MW-2 S-19  
Matrix Soil/Solid

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Printed Date/Time 03/21/2005 15:52  
Collected Date/Time 03/12/2005 12:50  
Received Date/Time 03/14/2005 11:34  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	init
Volatile Gas Chromatography/Mass Spectroscopy									
Tetrachloroethene	542	16.2	ug/Kg	SW8260B	A		03/12/05	03/17/05	TJE
1,3-Dichloropropane	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
2-Hexanone	162 U	162	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Dibromochloromethane	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,1,1,2-Tetrachloroethane	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,2-Dibromoethane	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Chlorobenzene	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Ethylbenzene	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
P & M -Xylene	32.5 U	32.5	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
o-Xylene	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Styrene	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Bromoform	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Isopropylbenzene (Cumene)	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Bromobenzene	16.2 U	15.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,2,3-Trichloropropane	32.5 U	32.5	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
n-Propylbenzene	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,1,2,2-Tetrachloroethane	32.5 U	32.5	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
2-Chlorotoluene	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
4-Chlorotoluene	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,3,5-Trimethylbenzene	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
tert-Butylbenzene	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,2,4-Trimethylbenzene	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
sec-Butylbenzene	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,3-Dichlorobenzene	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
4-Isopropyltoluene	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,4-Dichlorobenzene	16.2 U	15.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,2-Dichlorobenzene	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
n-Butylbenzene	16.2 U	16.2	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,2-Dibromo-3-chloropropane	65.0 U	65.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,2,4-Trichlorobenzene	32.5 U	32.5	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Hexachlorobutadiene	32.5 U	32.5	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Naphthalene	32.5 U	32.5	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
Methyl-t-butyl ether	26.0 U	26.0	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE
1,2,3-Trichlorobenzene	32.5 U	32.5	ug/Kg	SW8260B	A		03/12/05	03/15/05	TJE



SGS Ref.# 1051337003  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID MW-2 S-19  
Matrix Soil/Solid

All Dates/Times are Alaska Standard Time

Printed Date/Time 03/21/2005 15:52  
Collected Date/Time 03/12/2005 12:50  
Received Date/Time 03/14/2005 11:34  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>									
<b>Surrogates</b>									
Dibromofluoromethane <surr>	106		%	SW8260B	A	83-119	03/12/05	03/15/05	TJE
1,2-Dichloroethane-D4 <surr>	110		%	SW8260B	A	83-122	03/12/05	03/15/05	TJE
Toluene-d8 <surr>	103		%	SW8260B	A	87-115	03/12/05	03/15/05	TJE
4-Bromofluorobenzene <surr>	78.5		%	SW8260B	A	46-133	03/12/05	03/15/05	TJE
<b>Solids</b>									
Total Solids	83.7		%	SM20 2540G	B			03/15/05	JC



SGS Ref.# 1051337004  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID MW-3 S-5  
Matrix Soil/Solid

All Dates/Times are Alaska Standard Time  
Printed Date/Time 03/21/2005 15:52  
Collected Date/Time 03/13/2005 9:06  
Received Date/Time 03/14/2005 11:34  
Technical Director Stephen C. Ede

Sample Remarks:

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile Gas Chromatography/Mass Spectroscopy									
Dichlorodifluoromethane	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Chloromethane	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Vinyl chloride	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Bromomethane	50.5 U	50.5	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Chloroethane	50.5 U	50.5	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Trichlorofluoromethane	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,1-Dichloroethene	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Acetone	126 U	126	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Carbon disulfide	50.5 U	50.5	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Methylene chloride	50.5 U	50.5	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
trans-1,2-Dichloroethene	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
2-Butanone (MEK)	126 U	126	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
2,2-Dichloropropane	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
cis-1,2-Dichloroethene	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,1,1-Trichloroethane	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,1-Dichloroethane	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Bromochloromethane	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Chloroform	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Carbon tetrachloride	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Benzene	6.56 U	6.56	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,1-Dichloropropene	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2-Dichloroethane	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Trichloroethene	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2-Dichloropropane	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Dibromomethane	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Bromodichloromethane	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,1,2-Trichloroethane	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
2-Chloroethyl Vinyl Ether	50.5 U	50.5	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
cis-1,3-Dichloropropene	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
4-Methyl-2-pentanone (MIBK)	126 U	126	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Toluene	25.2 U	25.2	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
trans-1,3-Dichloropropene	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE



SGS Ref.# 1051337004  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID MW-3 S-5  
Matrix Soil/Solid

All Dates/Times are Alaska Standard Time

Printed Date/Time 03/21/2005 15:52  
Collected Date/Time 03/13/2005 9:06  
Received Date/Time 03/14/2005 11:34  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Container JD	Allowable Limits	Prep Date	Analysis Date	Init
Volatile Gas Chromatography/Mass Spectroscopy									
Tetrachloroethene	3590	126	ug/Kg	SW8260B	A		03/13/05	03/17/05	TJE
1,3-Dichloropropane	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
2-Hexanone	126 U	126	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Dibromochloromethane	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,1,1,2-Tetrachloroethane	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2-Dibromoethane	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Chlorobenzene	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Ethylbenzene	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
P & M -Xylene	25.2 U	25.2	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
o-Xylene	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Styrene	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Bromoform	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Isopropylbenzene (Cumene)	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Bromobenzene	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2,3-Trichloropropane	25.2 U	25.2	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
n-Propylbenzene	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,1,1,2-Tetrachloroethane	25.2 U	25.2	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
2-Chlorotoluene	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
4-Chlorotoluene	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,3,5-Trimethylbenzene	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
tert-Butylbenzene	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2,4-Trimethylbenzene	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
sec-Butylbenzene	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,3-Dichlorobenzene	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
4-Isopropyltoluene	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,4-Dichlorobenzene	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2-Dichlorobenzene	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
n-Butylbenzene	12.6 U	12.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2-Dibromo-3-chloropropane	50.5 U	50.5	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2,4-Trichlorobenzene	25.2 U	25.2	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Hexachlorobutadiene	25.2 U	25.2	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Naphthalene	25.2 U	25.2	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Methyl-t-butyl ether	20.2 U	20.2	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2,3-Trichlorobenzene	25.2 U	25.2	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE





SGS Ref.# 1051337004  
Client Name BGES Inc.  
Project Name# 4th & Gambell  
Client Sample ID MW-3 S-5  
Matrix Soil/Solid

All Dates/Times are Alaska Standard Time

Printed Date/Time 03/21/2005 15:52  
Collected Date/Time 03/13/2005 9:06  
Received Date/Time 03/14/2005 11:34  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
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#### Volatile Gas Chromatography/Mass Spectroscopy

##### Surrogates

Dibromofluoromethane <surr>	114		%	SW8260B	A	83-119	03/13/05	03/15/05	TJE
1,2-Dichloroethane-D4 <surr>	114		%	SW8260B	A	83-122	03/13/05	03/15/05	TJE
Toluene-d8 <surr>	102		%	SW8260B	A	87-115	03/13/05	03/15/05	TJE
4-Bromofluorobenzene <surr>	95.6		%	SW8260B	A	46-133	03/13/05	03/15/05	TJE

##### Solids

Total Solids	97.8		%	SM20 2540G	B			03/15/05	JC
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SGS Ref.# 1051337005  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID MW-3 S-11  
Matrix Soil/Solid

All Dates/Times are Alaska Standard Time  
Printed Date/Time 03/21/2005 15:52  
Collected Date/Time 03/13/2005 10:12  
Received Date/Time 03/14/2005 11:34  
Technical Director Stephen C. Ede

Sample Remarks:

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	init
Volatile Gas Chromatography/Mass Spectroscopy									
Dichlorodifluoromethane	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Chloromethane	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Vinyl chloride	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Bromomethane	80.6 U	80.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Chloroethane	80.6 U	80.6	ug/Kg	SWS260B	A		03/13/05	03/15/05	TJE
Trichlorofluoromethane	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,1-Dichloroethene	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Acetone	201 U	201	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Carbon disulfide	80.6 U	80.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Methylene chloride	80.6 U	80.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
trans-1,2-Dichloroethene	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
2-Butanone (MEK)	201 U	201	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
2,2-Dichloropropane	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,1,1-Trichloroethane	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,1-Dichloroethane	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
cis-1,2-Dichloroethene	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Bromochloromethane	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Chloroform	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Carbon tetrachloride	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Benzene	10.5 U	10.5	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,1-Dichloropropene	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2-Dichloroethane	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Trichloroethene	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2-Dichloropropane	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Dibromomethane	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Bromodichloromethane	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,1,2-Trichloroethane	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
2-Chloroethyl Vinyl Ether	80.6 U	80.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
cis-1,3-Dichloropropene	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
4-Methyl-2-pentanone (MIBK)	201 U	201	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Toluene	40.3 U	40.3	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
trans-1,3-Dichloropropene	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE



SGS Ref.# 1051337005  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID MW-3 S-11  
Matrix Soil/Solid

All Dates/Times are Alaska Standard Time  
Printed Date/Time 03/21/2005 15:52  
Collected Date/Time 03/13/2005 10:12  
Received Date/Time 03/14/2005 11:34  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile Gas Chromatography/Mass Spectroscopy									
Tetrachloroethene	5210	201	ug/Kg	SW8260B	A		03/13/05	03/17/05	TJE
1,3-Dichloropropene	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
2-Hexanone	201 U	201	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Dibromochloromethane	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,1,1,2-Tetrachloroethane	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2-Dibromoethane	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Chlorobenzene	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Ethylbenzene	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
P & M -Xylene	40.3 U	40.3	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
o-Xylene	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Styrene	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Bromoform	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Isopropylbenzene (Cumene)	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Bromobenzene	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2,3-Trichloropropane	40.3 U	40.3	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,1,2,2-Tetrachloroethane	40.3 U	40.3	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
n-Propylbenzene	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
2-Chlorotoluene	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
4-Chlorotoluene	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,3,5-Trimethylbenzene	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
tert-Butylbenzene	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2,4-Trimethylbenzene	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
sec-Butylbenzene	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,3-Dichlorobenzene	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
4-Isopropyltoluene	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,4-Dichlorobenzene	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2-Dichlorobenzene	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
n-Butylbenzene	20.1 U	20.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2-Dibromo-3-chloropropane	80.6 U	80.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2,4-Trichlorobenzene	40.3 U	40.3	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Hexachlorobutadiene	40.3 U	40.3	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Naphthalene	40.3 U	40.3	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2,3-Trichlorobenzene	40.3 U	40.3	ng/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Methyl-t-butyl ether	32.2 U	32.2	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE



SGS Ref.# 1051337005  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID MW-3 S-11  
Matrix Soil/Solid

All Dates/Times are Alaska Standard Time

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Collected Date/Time 03/13/2005 10:12  
Received Date/Time 03/14/2005 11:34  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	init
<b>Volatile Gas Chromatoaraphy/Mass Spectroscopy</b>									
<b>Surrogates</b>									
Dibromofluoromethane <surr>	111		%	SW8260B	A	83-119	03/13/05	03/15/05	TJE
1,2-Dichloroethane-D4 <sun>	115		%	SW8260B	A	83-122	03/13/05	03/15/05	TJE
Toluene-d8 <surr>	103		%	SW8260B	A	87-115	03/13/05	03/15/05	TJE
4-Bromofluorobenzene <surr>	91.5		%	SW8260B	A	46-133	03/13/05	03/15/05	TJE
<b>Solids</b>									
Total Solids	97.3		%	SM20 2540G	B			03/15/05	JC



SGS Ref.# 1051337006  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID MW-3 S-18  
Matrix Soil/Solid

All Dates/Times are Alaska Standard Time  
Printed Date/Time 03/21/2005 15:52  
Collected Date/Time 03/13/2005 11:36  
Received Date/Time 03/14/2005 11:34  
Technical Director Stephen C. Ede

Sample Remarks:

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile Gas Chromatoaraphy/Mass Spectroscopy									
Dichlorodifluoromethane	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Chloromethane	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Vinyl chloride	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Bromomethane	68.1 U	68.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Chloroethane	68.1 U	68.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Trichlorofluoromethane	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,1-Dichloroethene	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Acetone	170 U	170	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Carbon disulfide	68.1 U	68.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Methylene chloride	68.1 U	68.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
trans-1,2-Dichloroethene	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
2-Butanone (MEK)	170 U	170	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
2,2-Dichloropropane	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,1,1-Trichloroethane	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,1-Dichloroethane	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
cis-1,2-Dichloroethene	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Bromochloromethane	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Chloroform	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Carbon tetrachloride	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Benzene	8.86 U	8.86	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,1-Dichloropropene	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2-Dichloroethane	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Trichloroethene	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2-Dichloropropane	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Dibromomethane	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Bromodichloromethane	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,1,2-Trichloroethane	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
2-Chloroethyl Vinyl Ether	68.1 U	68.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
cis-1,3-Dichloropropene	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
4-Methyl-2-pentanone (MIBK)	170 U	170	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Toluene	34.1 U	34.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
trans-1,3-Dichloropropene	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE



SGS Ref.# 1051337006  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID MW-3 S-18  
Matrix Soil/Solid

All Dates/Times are Alaska Standard Time

Printed Date/Time 03/21/2005 15:52  
Collected Date/Time 03/13/2005 11:36  
Received Date/Time 03/14/2005 11:34  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile Gas Chromatography/Mass Spectroscopy									
Tetrachloroethene	3190	170	ug/Kg	SW8260B	A		03/13/05	03/17/05	TJE
1,3-Dichloropropane	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
2-Hexanone	170 U	170	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Dibromochloromethane	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,1,1,2-Tetrachloroethane	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2-Dibromoethane	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Chlorobenzene	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Ethylbenzene	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
P & M -Xylene	34.1 U	34.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
o-Xylene	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Styrene	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Bromoform	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Isopropylbenzene (Cumene)	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Bromobenzene	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2,3-Trichloropropane	34.1 U	34.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,1,2,2-Tetrachloroethane	34.1 U	34.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
n-Propylbenzene	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
2-Chlorotoluene	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
4-Chlorotoluene	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,3,5-Trimethylbenzene	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
tert-Butylbenzene	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2,4-Trimethylbenzene	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
sec-Butylbenzene	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,3-Dichlorobenzene	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
4-Isopropyltoluene	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,4-Dichlorobenzene	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2-Dichlorobenzene	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
n-Butylbenzene	17.0 U	17.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2-Dibromo-3-chloropropane	68.1 U	68.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2,4-Trichlorobenzene	34.1 U	34.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Hexachlorobutadiene	34.1 U	34.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Naphthalene	34.1 U	34.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2,3-Trichlorobenzene	34.1 U	34.1	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Methyl-t-butyl ether	27.2 U	27.2	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE



SGS Ref.# 1051337006  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID MW-3 S-18  
Matrix Soil/Solid

All Dates/Times are Alaska Standard Time

Printed Date/Time 03/21/2005 15:52  
Collected Date/Time 03/13/2005 11:36  
Received Date/Time 03/14/2005 11:34  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	init
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#### Volatile Gas Chromatography/Mass Spectroscopy

##### Surrogates

Dibromofluoromethane <surr>	103		%	SW8260B	A	83-119	03/13/05	03/15/05	TJE
1,2-Dichloroethane-D4 <surr>	110		%	SW8260B	A	83-122	03/13/05	03/15/05	TJE
Toluene-d8 <surr>	102		%	SW8260B	A	87-115	03/13/05	03/15/05	TJE
4-Bromofluorobenzene <surr>	80.5		%	SW8260B	A	46-133	03/13/05	03/15/05	TJE

##### Solids

Total Solids	81.6		%	SM20 2540G	B			03/15/05	JC
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SGS Ref.# 1051337007  
Client Name BGES Inc.  
Project Name/# 4th & Gambeil  
Client Sample JD MW-4 S-4  
Matrix Soil/Solid

All Dates/Times are Alaska Standard Time  
Printed Date/Time 03/21/2005 15:52  
Collected Date/Time 03/13/2005 13:59  
Received Date/Time 03/14/2005 11:34  
Technical Director Stephen C. Ede

Sample Remarks:

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile Gas Chromatography/Mass Spectroscopy									
Dichlorodifluoromethane	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Chloromethane	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Vinyl chloride	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Bromomethane	57.4 U	57.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Chloroethane	57.4 U	57.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Trichlorofluoromethane	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,1-Dichloroethene	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Acetone	144 U	144	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Carbon disulfide	57.4 U	57.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Methylene chloride	57.4 U	57.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
trans-1,2-Dichloroethene	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
2-Butanone (MEK)	144 U	144	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
2,2-Dichloropropane	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
cis-1,2-Dichloroethene	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,1,1-Trichloroethane	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,1-Dichloroethane	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Bromochloromethane	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Chloroform	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Carbon tetrachloride	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Benzene	7.46 U	7.46	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2-Dichloroethane	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,1-Dichloropropene	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Trichloroethene	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2-Dichloropropane	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Dibromomethane	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Bromodichloromethane	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
2-Chloroethyl Vinyl Ether	57.4 U	57.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,1,2-Trichloroethane	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
cis-1,3-Dichloropropene	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
4-Methyl-2-pentanone (MIBK)	144 U	144	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Toluene	28.7 U	28.7	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
trans-1,3-Dichloropropene	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE



SGS Ref.# 1051337007  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID MW-4 S-4  
Matrix Soil/Solid

All Dates/Times are Alaska Standard Time  
Printed Date/Time 03/21/2005 15:52  
Collected Date/Time 03/13/2005 13:59  
Received Date/Time 03/14/2005 11:34  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile Gas Chromatography/Mass Spectroscopy									
Tetrachloroethene	11100	359	ug/Kg	SW8260B	A		03/13/05	03/17/05	TJE
1,3-Dichloropropane	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
2-Hexanone	144 U	144	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Dibromochloromethane	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2-Dibromoethane	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,1,1,2-Tetrachloroethane	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Chlorobenzene	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Ethylbenzene	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
P & M -Xylene	28.7 U	28.7	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
o-Xylene	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Styrene	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Bromoform	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Isopropylbenzene (Cumene)	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Bromobenzene	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2,3-Trichloropropane	28.7 U	28.7	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
n-Propylbenzene	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,1,2,2-Tetrachloroethane	28.7 U	28.7	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
2-Chlorotoluene	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
4-Chlorotoluene	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,3,5-Trimethylbenzene	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
tert-Butylbenzene	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2,4-Trimethylbenzene	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
sec-Butylbenzene	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,3-Dichlorobenzene	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
4-Isopropyltoluene	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,4-Dichlorobenzene	14.4 U	14.4	ug/Kg	SW8250B	A		03/13/05	03/15/05	TJE
1,2-Dichlorobenzene	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
n-Butylbenzene	14.4 U	14.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2-Dibromo-3-chloropropane	57.4 U	57.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2,4-Trichlorobenzene	28.7 U	28.7	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Hexachlorobutadiene	28.7 U	28.7	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Naphthalene	28.7 U	28.7	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Methyl-t-butyl ether	23.0 U	23.0	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2,3-Trichlorobenzene	28.7 U	28.7	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE



SGS Ref.# 1051337007  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID MW-4 S-4  
Matrix Soil/Solid

All Dates/Times are Alaska Standard Time  
Printed Date/Time 03/21/2005 15:52  
Collected Date/Time 03/13/2005 13:59  
Received Date/Time 03/14/2005 11:34  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
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#### Volatile Gas Chromatography/Mass Spectroscopy

##### Surrogates

Dibromofluoromethane <surr>	111	%	SW8260B	A	83-119	03/13/05	03/15/05	TJE
1,2-Dichloroethane-D4 <surr>	115	%	SW8260B	A	83-122	03/13/05	03/15/05	TJE
Toluene-d8 <surr>	104	%	SW8260B	A	87-115	03/13/05	03/15/05	TJE
4-Bromofluorobenzene <surr>	90.2	%	SW8260B	A	46-133	03/13/05	03/15/05	TJE

##### Solids

Total Solids	97.8	%	SM20 2540G	B			03/15/05	JC
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SGS Ref.# 1051337008  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID MW-4 S-13  
Matrix Soil/Solid

All Dates/Times are Alaska Standard Time  
Printed Date/Time 03/21/2005 15:52  
Collected Date/Time 03/13/2005 15:10  
Received Date/Time 03/14/2005 11:34  
Technical Director Stephen C. Ede

Sample Remarks:

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile Gas Chromatography/Mass Spectroscopy									
Dichlorodifluoromethane	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Chloromethane	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Vinyl chloride	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Bromomethane	90.4 U	90.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Chloroethane	90.4 U	90.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Trichlorofluoromethane	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,1-Dichloroethene	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Acetone	226 U	226	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Carbon disulfide	90.4 U	90.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Methylene chloride	90.4 U	90.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
trans-1,2-Dichloroethene	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
2-Butanone (MEK)	226 U	226	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
2,2-Dichloropropane	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,1-Dichloroethane	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
cis-1,2-Dichloroethene	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,1,1-Trichloroethane	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Bromochloromethane	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Chloroform	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Carbon tetrachloride	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Benzene	11.8 U	11.8	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,1-Dichloropropene	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2-Dichloroethane	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Trichloroethene	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2-Dichloropropane	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Dibromomethane	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Bromodichloromethane	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
2-Chloroethyl Vinyl Ether	90.4 U	90.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,1,2-Trichloroethane	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
cis-1,3-Dichloropropene	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
4-Methyl-2-pentanone (MIBK)	226 U	226	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Toluene	45.2 U	45.2	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
trans-1,3-Dichloropropene	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE



SGS Ref.# 1051337008  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID MW-4 S-13  
Matrix Soil/Solid

All Dates/Times are Alaska Standard Time  
Printed Date/Time 03/21/2005 15:52  
Collected Date/Time 03/13/2005 15:10  
Received Date/Time 03/14/2005 11:34  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	init
Volatile Gas Chromatography/Mass Spectroscopy									
Tetrachloroethene	2130	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,3-Dichloropropane	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
2-Hexanone	226 U	226	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Dibromochloromethane	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2-Dibromoethane	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,1,1,2-Tetrachloroethane	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Chlorobenzene	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Ethylbenzene	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
P & M -Xylene	45.2 U	45.2	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
o-Xylene	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Styrene	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Bromoform	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Isopropylbenzene (Cumene)	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Bromobenzene	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2,3-Trichloropropane	45.2 U	45.2	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
n-Propylbenzene	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,1,2,2-Tetrachloroethane	45.2 U	45.2	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
2-Chlorotoluene	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
4-Chlorotoluene	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,3,5-Trimethylbenzene	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
tert-Butylbenzene	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2,4-Trimethylbenzene	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
sec-Butylbenzene	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,3-Dichlorobenzene	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
4-Isopropyltoluene	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,4-Dichlorobenzene	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2-Dichlorobenzene	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
n-Butylbenzene	22.6 U	22.6	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2-Dibromo-3-chloropropane	90.4 U	90.4	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2,4-Trichlorobenzene	45.2 U	45.2	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Hexachlorobutadiene	45.2 U	45.2	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Naphthalene	45.2 U	45.2	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
1,2,3-Trichlorobenzene	45.2 U	45.2	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE
Methyl-t-butyl ether	36.2 U	36.2	ug/Kg	SW8260B	A		03/13/05	03/15/05	TJE



SGS Ref.# 1051337008  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID MW-4 S-13  
Matrix Soil/Solid

All Dates/Times are Alaska Standard Time  
Printed Date/Time 03/21/2005 15:52  
Collected Date/Time 03/13/2005 15:10  
Received Date/Time 03/14/2005 11:34  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	init
Volatile Gas Chromatography/Mass Spectroscopy									
Surrogates									
Dibromofluoromethane <surr>	113		%	SW8260B	A	83-119	03/13/05	03/15/05	TJE
1,2-Dichloroethane-D4 <surr>	117		%	SW8260B	A	83-122	03/13/05	03/15/05	TJE
Toluene-d8 <surr>	104		%	SW8260B	A	87-115	03/13/05	03/15/05	TJE
4-Bromofluorobenzene <surr>	94.7		%	SW8260B	A	46-133	03/13/05	03/15/05	TJE
Solids									
Total Solids	95.4		%	SM20 2540G	B			03/15/05	JC



SGS Ref.# 1051337009  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID Trip Blanks  
Matrix Soil/Solid

All Dates/Times are Alaska Standard Time  
Printed Date/Time 03/21/2005 15:52  
Collected Date/Time 03/14/2005 0:00  
Received Date/Time 03/14/2005 11:34  
Technical Director Stephen C. Ede

Sample Remarks:

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile Gas Chromatography/Mass Spectroscopy									
Dichlorodifluoromethane	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
Chloromethane	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
Vinyl chloride	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
Bromomethane	101 U	101	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
Chloroethane	101 U	101	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
Trichlorofluoromethane	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
1,1-Dichloroethene	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
Acetone	252 U	252	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
Carbon disulfide	101 U	101	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
Methylene chloride	101 U	101	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
trans-1,2-Dichloroethene	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
2-Butanone (MEK)	252 U	252	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
2,2-Dichloropropane	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
cis-1,2-Dichloroethene	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
1,1,1-Trichloroethane	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
1,1-Dichloroethane	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
Bromochloromethane	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
Chloroform	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
Carbon tetrachloride	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
Benzene	13.1 U	13.1	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
1,1-Dichloropropene	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
1,2-Dichloroethane	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
Trichloroethene	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
1,2-Dichloropropane	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
Dibromomethane	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
Bromodichloromethane	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
1,1,2-Trichloroethane	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
2-Chloroethyl Vinyl Ether	101 U	101	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
cis-1,3-Dichloropropene	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
4-Methyl-2-pentanone (MIBK)	252 U	252	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
Toluene	50.5 U	50.5	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
trans-1,3-Dichloropropene	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE





SGS Ref.# 1051337009  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID Trip Blanks  
Matrbx Soil/Solid

All Dates/Times are Alaska Standard Time  
Printed Date/Time 03/21/2005 15:52  
Collected Date/Time 03/14/2005 0:00  
Received Date/Time 03/14/2005 11:34  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile Gas Chromatography/Mass Spectroscopy									
Tetrachloroethene	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/17/05	TJE
1,3-Dichloropropane	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
2-Hexanone	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
Dibromochloromethane	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
1,1,1,2-Tetrachloroethane	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
1,2-Dibromoethane	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
Chlorobenzene	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
Ethylbenzene	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
P & M -Xylene	50.5 U	50.5	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
o-Xylene	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
Styrene	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
Bromoform	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
Isopropylbenzene (Cmnene)	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
Bromobenzene	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
1,2,3-Trichloropropane	50.5 U	50.5	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
n-Propylbenzene	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
1,1,2,2-Tetrachloroethane	50.5 U	50.5	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
2-Chlorotoluene	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
4-Chlorotoluene	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
1,3,5-Trimethylbenzene	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
tert-Butylbenzene	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
1,2,4-Trimethylbenzene	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
sec-Butylbenzene	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
1,3-Dichlorobenzene	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
4-Isopropyltoluene	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
1,4-Dichlorobenzene	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
1,2-Dichlorobenzene	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
n-Butylbenzene	25.2 U	25.2	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
1,2-Dibromo-3-chloropropane	101 U	101	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
1,2,4-Trichlorobenzene	50.5 U	50.5	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
Hexachlorobutadiene	50.5 U	50.5	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
Naphthalene	50.5 U	50.5	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
1,2,3-Trichlorobenzene	50.5 U	50.5	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE
Methyl-t-butyl ether	40.4 U	40.4	ug/Kg	SW8260B	A		03/14/05	03/16/05	TJE



SGS Ref.# 1051337009  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID Trip Blanks  
Matrix Soil/Solid

All Dates/Times are Alaska Standard Time  
Printed Date/Time 03/21/2005 15:52  
Collected Date/Time 03/14/2005 0:00  
Received Date/Time 03/14/2005 11:34  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
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**Volatile Gas Chromatography/Mass Spectroscopy**

**Surrogates**

Dibromofluoromethane <sun>	108		%	SW8260B	A	83-119	03/14/05	03/16/05	TJE
1,2-Dichloroethane-D4 <surr>	118		%	SW8260B	A	83-122	03/14/05	03/16/05	TJE
Toluene-d8 <surr>	105		%	SW8260B	A	87-115	03/14/05	03/16/05	TJE
4-Bromofluorobenzene <surr>	102		%	SW8260B	A	46-133	03/14/05	03/16/05	TJE

**Solids**

Total Solids	100		%	SM20 2540G	A			03/15/05	JC
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**SGS**

SGS Ref.# 614291 Method Blank  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Matrix Soil/Solid

Printed Date/Time 03/24/2005 14:58  
Prep Batch VXX 13340  
Method SW5035  
Date 03/15/2005

QC results affect the following production samples:

1051337001, 1051337002, 1051337003, 1051337004, 1051337005, 1051337006, 1051337007, 1051337008,  
1051337009

Sample Remarks:

Parameter	Results	Reporting Limit	Units	Analysis Date	Init
Volatile Gas Chromatography/Mass Spectroscopy					



SGS Ref.# 614291 Method Blank  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Matrix Soil/Solid

Printed Date/Time 03/24/2005 14:58  
Prep Batch VXX 13340  
Method SW5035  
Date 03/15/2005

Parameter	Results	Reporting Limit	Units	Analysis Date	Init
Volatile Gas Chromatography/Mass Spectroscopy					
Dichlorodifluoromethane	25.0 U	25.0	ug/Kg	03/15/05	TJE
Chloromethane	25.0 U	25.0	ug/Kg	03/15/05	TJE
Vinyl chloride	25.0 U	25.0	ug/Kg	03/15/05	TJE
Bromomethane	100 U	100	ug/Kg	03/15/05	TJE
Chloroethane	100 U	100	ug/Kg	03/15/05	TJE
Trichlorofluoromethane	25.0 U	25.0	ug/Kg	03/15/05	TJE
1,1-Dichloroethene	25.0 U	25.0	ug/Kg	03/15/05	TJE
Acetone	250 U	250	ug/Kg	03/15/05	TJE
Carbon disulfide	100 U	100	ug/Kg	03/15/05	TJE
Methylene chloride	100 U	100	ug/Kg	03/15/05	TJE
trans-1,2-Dichloroethene	25.0 U	25.0	ug/Kg	03/15/05	TJE
2-Butanone (MEK)	250 U	250	ug/Kg	03/15/05	TJE
2,2-Dichloropropane	25.0 U	25.0	ug/Kg	03/15/05	TJE
1,1,1-Trichloroethane	25.0 U	25.0	ug/Kg	03/15/05	TJE
cis-1,2-Dichloroethene	25.0 U	25.0	ug/Kg	03/15/05	TJE
1,1-Dichloroethane	25.0 U	25.0	ug/Kg	03/15/05	TJE
Bromochloromethane	25.0 U	25.0	ug/Kg	03/15/05	TJE
Chloroform	25.0 U	25.0	ug/Kg	03/15/05	TJE
Carbon tetrachloride	25.0 U	25.0	ug/Kg	03/15/05	TJE
Benzene	13.0 U	13.0	ug/Kg	03/15/05	TJE
1,2-Dichloroethane	25.0 U	25.0	ug/Kg	03/15/05	TJE
1,1-Dichloropropene	25.0 U	25.0	ug/Kg	03/15/05	TJE
Trichloroethene	25.0 U	25.0	ug/Kg	03/15/05	TJE
1,2-Dichloropropane	25.0 U	25.0	ug/Kg	03/15/05	TJE
Dibromomethane	25.0 U	25.0	ug/Kg	03/15/05	TJE
Bromodichloromethane	25.0 U	25.0	ug/Kg	03/15/05	TJE
1,1,2-Trichloroethane	25.0 U	25.0	ug/Kg	03/15/05	TJE
2-Chloroethyl Vinyl Ether	100 U	100	ug/Kg	03/15/05	TJE
cis-1,3-Dichloropropene	25.0 U	25.0	ug/Kg	03/15/05	TJE
4-Methyl-2-pentanone (MIBK)	250 U	250	ug/Kg	03/15/05	TJE
Toluene	50.0 U	50.0	ug/Kg	03/15/05	TJE
trans-1,3-Dichloropropene	25.0 U	25.0	ug/Kg	03/15/05	TJE
Tetrachloroethene	25.0 U	25.0	ug/Kg	03/15/05	TJE
1,3-Dichloropropane	25.0 U	25.0	ug/Kg	03/15/05	TJE
2-Hexanone	250 U	250	ug/Kg	03/15/05	TJE
Dibromochloromethane	25.0 U	25.0	ug/Kg	03/15/05	TJE
1,1,1,2-Tetrachloroethane	25.0 U	25.0	ug/Kg	03/15/05	TJE
1,2-Dibromoethane	25.0 U	25.0	ug/Kg	03/15/05	TJE
Chlorobenzene	25.0 U	25.0	ug/Kg	03/15/05	TJE





SGS Ref.# 614291 Method Blank  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Matrix Soil/Solid

Printed Date/Time 03/24/2005 14:58  
Prep Batch VXX 13340  
Method SW5035  
Date 03/15/2005

Parameter	Results	Reporting Limit	Units	Analysis Date	Init
Volatile Gas Chromatography/Mass Spectroscopy					
Ethylbenzene	25.0 U	25.0	ug/Kg	03/15/05	TJE
P & M -Xylene	50.0 U	50.0	ug/Kg	03/15/05	TJE
o-Xylene	25.0 U	25.0	ug/Kg	03/15/05	TJE
Styrene	25.0 U	25.0	ug/Kg	03/15/05	TJE
Bromoform	25.0 U	25.0	ug/Kg	03/15/05	TJE
Isopropylbenzene (Cumene)	25.0 U	25.0	ug/Kg	03/15/05	TJE
Bromobenzene	25.0 U	25.0	ug/Kg	03/15/05	TJE
1,2,3-Trichloropropane	50.0 U	50.0	ug/Kg	03/15/05	TJE
1,1,2,2-Tetrachloroethane	50.0 U	50.0	ug/Kg	03/15/05	TJE
n-Propylbenzene	25.0 U	25.0	ug/Kg	03/15/05	TJE
2-Chlorotoluene	25.0 U	25.0	ug/Kg	03/15/05	TJE
4-Chlorotoluene	25.0 U	25.0	ug/Kg	03/15/05	TJE
1,3,5-Trimethylbenzene	25.0 U	25.0	ug/Kg	03/15/05	TJE
tert-Butylbenzene	25.0 U	25.0	ug/Kg	03/15/05	TJE
1,2,4-Trimethylbenzene	25.0 U	25.0	ug/Kg	03/15/05	TJE
sec-Butylbenzene	25.0 U	25.0	ug/Kg	03/15/05	TJE
1,3-Dichlorobenzene	25.0 U	25.0	ug/Kg	03/15/05	TJE
4-Isopropyltoluene	25.0 U	25.0	ug/Kg	03/15/05	TJE
1,4-Dichlorobenzene	25.0 U	25.0	ug/Kg	03/15/05	TJE
1,2-Dichlorobenzene	25.0 U	25.0	ug/Kg	03/15/05	TJE
n-Butylbenzene	25.0 U	25.0	ug/Kg	03/15/05	TJE
1,2-Dibromo-3-chloropropane	100 U	100	ug/Kg	03/15/05	TJE
1,2,4-Trichlorobenzene	50.0 U	50.0	ug/Kg	03/15/05	TJE
Hexachlorobutadiene	50.0 U	50.0	ug/Kg	03/15/05	TJE
Naphthalene	50.0 U	50.0	ug/Kg	03/15/05	TJE
Methyl-t-butyl ether	40.0 U	40.0	ug/Kg	03/15/05	TJE
1,2,3-Trichlorobenzene	50.0 U	50.0	ug/Kg	03/15/05	TJE
Surrogates					
Dibromofluoromethane <surrogate>	112		%	03/15/05	TJE
1,2-Dichloroethane-D4 <surrogate>	116		%	03/15/05	TJE
Toluene-d8 <surrogate>	103		%	03/15/05	TJE
4-Bromofluorobenzene <surrogate>	102		%	03/15/05	TJE

Batch VMS 7326  
Method SW8260B  
Instrument HP 5890 Series II MSI VMA

# SGS

SGS Ref.# 614292 Lab Control Sample

Printed Date/Time 03/24/2005 14:58  
Prep Batch VXX 13340  
Method SW5035  
Date 03/15/2005

Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Matrix Soil/Solid

QC results affect the following production samples:

1051337001, 1051337002, 1051337003, 1051337004, 1051337005, 1051337006, 1051337007, 1051337008, 1051337009

Sample Remarks:  
LCS

Parameter	QC Results	Pet Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date	Init
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Volatile Gas Chromatography/Mass Spectroscopy



SGS Ref.# 614292 Lab Control Sample

Printed Date/Time 03/24/2005 14:58  
Prep Batch VXX 13340  
Method SW5035  
Date 03/15/2005

Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Matrix Soil/Solid

Parameter	QC Results	Pot Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date	Init
Volatile Gas Chromatography/Mass Spectroscopy								
Dichlorodifluoromethane	LCS 718	96	(34-136)			750 ug/Kg	03/15/05	TJE
Chloromethane	LCS 733	98	(51-129)			750 ug/Kg	03/15/05	TJE
Vinyl chloride	LCS 755	101	(58-126)			750 ug/Kg	03/15/05	TJE
Bromomethane	LCS 792	106	(45-141)			750 ug/Kg	03/15/05	TJE
Chloroethane	LCS 822	110	(41-141)			750 ug/Kg	03/15/05	TJE
Trichlorofluoromethane	LCS 706	94	(49-139)			750 ug/Kg	03/15/05	TJE
1,1-Dichloroethene	LCS 864	115	(81-136)			750 ug/Kg	03/15/05	TJE
Acetone	LCS 2270	101	(40-141)			2250 ug/Kg	03/15/05	TJE
Carbon disulfide	LCS 1130	100	(62-145)			1130 ug/Kg	03/15/05	TJE
Methylene chloride	LCS 824	110	(63-137)			750 ug/Kg	03/15/05	TJE
trans-1,2-Dichloroethene	LCS 818	109	(81-130)			750 ug/Kg	03/15/05	TJE
2-Butanone (MEK)	LCS 2050	91	(40-135)			2250 ug/Kg	03/15/05	TJE
2,2-Dichloropropane	LCS 888	118	(83-134)			750 ug/Kg	03/15/05	TJE
1,1,1-Trichloroethane	LCS 819	109	(83-129)			750 ug/Kg	03/15/05	TJE
cis-1,2-Dichloroethene	LCS 834	111	(82-124)			750 ug/Kg	03/15/05	TJE
1,1-Dichloroethane	LCS 856	114	(73-125)			750 ug/Kg	03/15/05	TJE
Bromochloromethane	LCS 827	110	(71-127)			750 ug/Kg	03/15/05	TJE
Chloroform	LCS 886	118	(72-124)			750 ug/Kg	03/15/05	TJE
Carbon tetrachloride	LCS 822	110	(67-133)			750 ug/Kg	03/15/05	TJE
Benzene	LCS 853	114	(86-122)			750 ug/Kg	03/15/05	TJE
1,2-Dichloroethane	LCS 895	119	(82-136)			750 ug/Kg	03/15/05	TJE



SGS Ref.# 614292 Lab Control Sample

Printed Date/Time 03/24/2005 14:58  
Prep Batch VXX 13340  
Method SW5035  
Date 03/15/2005

Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Matrix Soil/Solid

Parameter	QC Results	Pet Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date	Init
Volatile Gas Chromatography/Mass Spectroscopy								
1,1-Dichloropropene	LCS 799	107	(88-131)			750 ug/Kg	03/15/05	TJE
Trichloroethene	LCS 850	113	(77-124)			750 ug/Kg	03/15/05	TJE
1,2-Dichloropropane	LCS 862	115	(71-120)			750 ug/Kg	03/15/05	TJE
Dibromomethane	LCS 842	112	(79-128)			750 ug/Kg	03/15/05	TJE
Bromodichloromethane	LCS 888	118	(79-123)			750 ug/Kg	03/15/05	TJE
2-Chloroethyl Vinyl Ether	LCS 1280	114	(32-149)			1130 ug/Kg	03/15/05	TJE
1,1,2-Trichloroethane	LCS 828	110	(81-123)			750 ug/Kg	03/15/05	TJE
cis-1,3-Dichloropropene	LCS 877	117	(72-126)			750 ug/Kg	03/15/05	TJE
4-Methyl-2-pentanone (MIBK)	LCS 2830	126	(80-129)			2250 ug/Kg	03/15/05	TJE
Toluene	LCS 785	105	(80-123)			750 ug/Kg	03/15/05	TJE
trans-1,3-Dichloropropene	LCS 858	114	(65-125)			750 ug/Kg	03/15/05	TJE
Tetrachloroethene	LCS 820	109	(78-135)			750 ug/Kg	03/15/05	TJE
1,3-Dichloropropane	LCS 849	113	(76-123)			750 ug/Kg	03/15/05	TJE
2-Hexanone	LCS 2850	126	(75-134)			2250 ug/Kg	03/15/05	TJE
Dibromochloromethane	LCS 851	113	(78-130)			750 ug/Kg	03/15/05	TJE
1,1,1,2-Tetrachloroethane	LCS 857	114	(75-125)			750 ug/Kg	03/15/05	TJE
1,2-Dibromoethane	LCS 859	115	(70-124)			750 ug/Kg	03/15/05	TJE
Chlorobenzene	LCS 795	106	(86-123)			750 ug/Kg	03/15/05	TJE
Ethylbenzene	LCS 833	111	(84-127)			750 ug/Kg	03/15/05	TJE
P & M -Xylene	LCS 1620	108	(88-124)			1500 ug/Kg	03/15/05	TJE
o-Xylene	LCS 787	105	(87-123)			750 ug/Kg	03/15/05	TJE





SGS Ref.# 614292 Lab Control Sample

Printed Date/Time 03/24/2005 14:58  
Prep Batch VXX 13340  
Method SW5035  
Date 03/15/2005

Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Matrix Soil/Solid

Parameter	QC Results	Pet Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date	Init
Volatile Gas Chromatography/Mass Spectroscopy								
Styrene	LCS 825	110	(87-124)			750 ug/Kg	03/15/05	TJE
Bromoform	LCS 821	109	(72-130)			750 ug/Kg	03/15/05	TJE
Isopropylbenzene (Cumene)	LCS 805	107	(90-126)			750 ug/Kg	03/15/05	TJE
Bromobenzene	LCS 771	103	(66-121)			750 ug/Kg	03/15/05	TJE
1,2,3-Trichloropropane	LCS 817	109	(87-128)			750 ug/Kg	03/15/05	TJE
1,1,2,2-Tetrachloroethane	LCS 819	109	(77-132)			750 ug/Kg	03/15/05	TJE
n-Propylbenzene	LCS 791	106	(88-131)			750 ug/Kg	03/15/05	TJE
2-Chlorotoluene	LCS 777	104	(85-128)			750 ug/Kg	03/15/05	TJE
4-Chlorotoluene	LCS 795	106	(87-126)			750 ug/Kg	03/15/05	TJE
1,3,5-Trimethylbenzene	LCS 783	104	(89-128)			750 ug/Kg	03/15/05	TJE
tert-Butylbenzene	LCS 795	106	(89-128)			750 ug/Kg	03/15/05	TJE
1,2,4-Trimethylbenzene	LCS 759	101	(88-125)			750 ug/Kg	03/15/05	TJE
sec-Butylbenzene	LCS 837	112	(90-132)			750 ug/Kg	03/15/05	TJE
1,3-Dichlorobenzene	LCS 788	105	(87-121)			750 ug/Kg	03/15/05	TJE
4-Isopropyltoluene	LCS 787	105	(91-127)			750 ug/Kg	03/15/05	TJE
1,4-Dichlorobenzene	LCS 778	104	(87-125)			750 ug/Kg	03/15/05	TJE
1,2-Dichlorobenzene	LCS 772	103	(85-119)			750 ug/Kg	03/15/05	TJE
n-Butylbenzene	LCS 822	110	(88-130)			750 ug/Kg	03/15/05	TJE
1,2-Dibromo-3-chloropropane	LCS 814	108	(81-130)			750 ug/Kg	03/15/05	TJE
1,2,4-Trichlorobenzene	LCS 824	110	(83-125)			750 ug/Kg	03/15/05	TJE
Hexachlorobutadiene	LCS 782	104	(84-134)			750 ug/Kg	03/15/05	TJE

# SGS

SGS Ref.# 614292 Lab Control Sample

Printed Date/Time 03/24/2005 14:58  
Prep Batch VXX 13340Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Matrix Soil/SolidMethod SW5035  
Date 03/15/2005

Parameter	QC Results	Pet Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date	Init
Volatile Gas Chromatography/Mass Spectroscopy								
Naphthalene	LCS 784	105	(79-122)			750 ug/Kg	03/15/05	TJE
Methyl-t-butyl ether	LCS 1250	111	(85-122)			1130 ug/Kg	03/15/05	TJE
1,2,3-Trichlorobenzene	LCS 803	107	(79-129)			750 ug/Kg	03/15/05	TJE
Surrogates								
Dibromofluoromethane <surr>	LCS	111	(83-119)			750 ug/Kg	03/15/05	TJE
1,2-Dichloroethane-D4 <surr>	LCS	111	(83-122)			750 ug/Kg	03/15/05	TJE
Toluene-d8 <surr>	LCS	104	(87-115)			750 ug/Kg	03/15/05	TJE
4-Bromofluorobenzene <surr>	LCS	102	(46-133)			750 ug/Kg	03/15/05	TJE

Batch VMS 7326  
Method SW8260B  
Instrument HP 5890 Series II MSI VMA

# SGS

SGS Ref# 614326 Matrix Spike  
614327 Matrix Spike Duplicate

Printed Date/Time 03/24/2005 14:58  
Prep Batch VXX 13340  
Method Vol. Extraction SW8260 Fiel  
Date 03/15/2005

Original 1051054002  
Matrix Soil/Solid

QC results affect the following production samples:

1051337001, 1051337002, 1051337003, 1051337004, 1051337005, 1051337006, 1051337007, 1051337008, 1051337009

Sample Remarks:

MS 8260 - MS result for 4-methyl-2-pentanone is biased high and does not meet laboratory QC criteria. This analyte is not detected above the PQL in the original sample.

MSD 8260 - MSD results for 4-methyl-2-pentanone and 2-hexanone are biased high and do not meet laboratory QC criteria. These analytes are not detected above the PQL in the original sample.

Parameter	Qualifiers	Original Result	QC Result	Pet Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date	Init
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Volatile Gas Chromatography/Mass Spectroscopy

# SGS

SGS Ref.# 614326 Matrix Spike  
614327 Matrix Spike Duplicate

Printed Date/Time 03/24/2005 14:58  
Prep Batch VXX 13340  
Method Vol. Extraction SW8260 Fiel  
Date 03/15/2005

Original 1051054002  
Matrix Soil/Solid

Parameter	Qualifiers	Original Result	QC Result	Pet Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date	Init
Volatile Gas Chromatography/Mass Spectroscopy										
Dichlorodifluoromethane	MS	17.3 U	517	100	(34-136)			517 ug/Kg	03/16/05	TJE
	MSD		471	91		9	(< 20)	517 ug/Kg	03/16/05	TJE
Chloromethane	MS	17.3 U	523	101	(51-129)			517 ug/Kg	03/16/05	TJE
	MSD		495	96		6	(< 20)	517 ug/Kg	03/16/05	TJE
Vinyl chloride	MS	17.3 U	487	94	(58-126)			517 ug/Kg	03/16/05	TJE
	MSD		446	86		9	(< 20)	517 ug/Kg	03/16/05	TJE
Bromomethane	MS	69.0 U	562	109	(45-141)			517 ug/Kg	03/16/05	TJE
	MSD		546	105		3	(< 20)	517 ug/Kg	03/16/05	TJE
Chloroethane	MS	69.0 U	594	115	(41-141)			517 ug/Kg	03/16/05	TJE
	MSD		567	109		5	(< 20)	517 ug/Kg	03/16/05	TJE
Trichlorofluoromethane	MS	17.3 U	532	103	(49-139)			517 ug/Kg	03/16/05	TJE
	MSD		497	96		7	(< 20)	517 ug/Kg	03/16/05	TJE
1,1-Dichloroethene	MS	17.3 U	599	116	(81-136)			517 ug/Kg	03/16/05	TJE
	MSD		573	111		4	(< 20)	517 ug/Kg	03/16/05	TJE
Acetone	MS	173 U	1600	103	(40-141)			1550 ug/Kg	03/16/05	TJE
	MSD		1810	117		12	(< 20)	1550 ug/Kg	03/16/05	TJE
Carbon disulfide	MS	69.0 U	800	103	(62-145)			777 ug/Kg	03/16/05	TJE
	MSD		758	98		5	(< 20)	777 ug/Kg	03/16/05	TJE
Methylene chloride	MS	69.0 U	593	115	(63-137)			517 ug/Kg	03/16/05	TJE
	MSD		572	111		4	(< 20)	517 ug/Kg	03/16/05	TJE
trans-1,2-Dichloroethene	MS	17.3 U	565	109	(81-130)			517 ug/Kg	03/16/05	TJE
	MSD		537	104		5	(< 20)	517 ug/Kg	03/16/05	TJE
2-Butanone (MEK)	MS	173 U	1540	99	(40-135)			1550 ug/Kg	03/16/05	TJE
	MSD		1650	106		7	(< 20)	1550 ug/Kg	03/16/05	TJE
2,2-Dichloropropane	MS	17.3 U	584	113	(83-134)			517 ug/Kg	03/16/05	TJE
	MSD		567	110		3	(< 20)	517 ug/Kg	03/16/05	TJE
1,1,1-Trichloroethane	MS	17.3 U	590	114	(83-129)			517 ug/Kg	03/16/05	TJE
	MSD		575	111		3	(< 20)	517 ug/Kg	03/16/05	TJE
1,1-Dichloroethane	MS	17.3 U	612	118	(73-125)			517 ug/Kg	03/16/05	TJE
	MSD		592	114		3	(< 20)	517 ug/Kg	03/16/05	TJE
cis-1,2-Dichloroethene	MS	17.3 U	577	111	(82-124)			517 ug/Kg	03/16/05	TJE
	MSD		568	110		1	(< 20)	517 ug/Kg	03/16/05	TJE
Bromochloromethane	MS	17.3 U	582	112	(71-127)			517 ug/Kg	03/16/05	TJE
	MSD		577	111		1	(< 20)	517 ug/Kg	03/16/05	TJE
Chloroform	MS	17.3 U	631	122	(72-124)			517 ug/Kg	03/16/05	TJE
	MSD		620	120		2	(< 20)	517 ug/Kg	03/16/05	TJE
Carbon tetrachloride	MS	17.3 U	574	111	(67-133)			517 ug/Kg	03/16/05	TJE
	MSD		553	107		4	(< 20)	517 ug/Kg	03/16/05	TJE
Benzene	MS	8.98 U	604	117	(86-122)			517 ug/Kg	03/16/05	TJE
	MSD		585	113		3	(< 20)	517 ug/Kg	03/16/05	TJE



SGS Ref.#

614326

Matrix Spike

Printed Date/Time

03/24/2005 14:58

614327

Matrix Spike Duplicate

Prep

Batch

VXX 13340

Method

Vol. Extraction SW8260 Fiel

Date

03/15/2005

Original

1051054002

Matrix

Soil/Solid

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date	Init
Volatile Gas Chromatography/Mass Spectroscopy										
1,2-Dichloroethane	MS	17.3 U	659	127	(82-136)			517 ug/Kg	03/16/05	TJE
	MSD		633	122		4	(< 20)	517 ug/Kg	03/16/05	TJE
1,1-Dichloropropene	MS	17.3 U	575	111	(88-131)			517 ug/Kg	03/16/05	TJE
	MSD		550	106		4	(< 20)	517 ug/Kg	03/16/05	TJE
Trichloroethene	MS	17.3 U	609	118	(77-124)			517 ug/Kg	03/16/05	TJE
	MSD		588	113		4	(< 20)	517 ug/Kg	03/16/05	TJE
1,2-Dichloropropane	MS	17.3 U	602	116	(71-120)			517 ug/Kg	03/16/05	TJE
	MSD		598	116		1	(< 20)	517 ug/Kg	03/16/05	TJE
Dibromomethane	MS	17.3 U	601	116	(79-128)			517 ug/Kg	03/16/05	TJE
	MSD		597	115		1	(< 20)	517 ug/Kg	03/16/05	TJE
Bromodichloromethane	MS	17.3 U	631	122	(79-123)			517 ug/Kg	03/16/05	TJE
	MSD		610	118		3	(< 20)	517 ug/Kg	03/16/05	TJE
2-Chloroethyl Vinyl Ether	MS	69.0 U	893	115	(32-149)			777 ug/Kg	03/16/05	TJE
	MSD		899	116		1	(< 20)	777 ug/Kg	03/16/05	TJE
1,1,2-Trichloroethane	MS	17.3 U	574	111	(81-123)			517 ug/Kg	03/16/05	TJE
	MSD		588	114		2	(< 20)	517 ug/Kg	03/16/05	TJE
cis-1,3-Dichloropropene	MS	17.3 U	609	118	(72-126)			517 ug/Kg	03/16/05	TJE
	MSD		588	114		3	(< 20)	517 ug/Kg	03/16/05	TJE
4-Methyl-2-pentanone (MIBK)	MS	173 U	2070	134 *	(80-129)			1550 ug/Kg	03/16/05	TJE
	MSD		2050	132 *		1	(< 20)	1550 ug/Kg	03/16/05	TJE
Toluene	MS	34.5 U	551	106	(80-123)			517 ug/Kg	03/16/05	TJE
	MSD		550	106		0	(< 20)	517 ug/Kg	03/16/05	TJE
trans-1,3-Dichloropropene	MS	17.3 U	605	117	(65-125)			517 ug/Kg	03/16/05	TJE
	MSD		602	116		1	(< 20)	517 ug/Kg	03/16/05	TJE
Tetrachloroethene	MS	17.3 U	576	111	(78-135)			517 ug/Kg	03/16/05	TJE
	MSD		573	111		0	(< 20)	517 ug/Kg	03/16/05	TJE
1,3-Dichloropropane	MS	17.3 U	595	115	(76-123)			517 ug/Kg	03/16/05	TJE
	MSD		616	119		3	(< 20)	517 ug/Kg	03/16/05	TJE
2-Hexanone	MS	173 U	2020	130	(75-134)			1550 ug/Kg	03/16/05	TJE
	MSD		2180	140 *		7	(< 20)	1550 ug/Kg	03/16/05	TJE
Dibromochloromethane	MS	17.3 U	598	116	(78-130)			517 ug/Kg	03/16/05	TJE
	MSD		596	115		0	(< 20)	517 ug/Kg	03/16/05	TJE
1,1,1,2-Tetrachloroethane	MS	17.3 U	601	116	(75-125)			517 ug/Kg	03/16/05	TJE
	MSD		604	117		0	(< 20)	517 ug/Kg	03/16/05	TJE
1,2-Dibromoethane	MS	17.3 U	608	117	(70-124)			517 ug/Kg	03/16/05	TJE
	MSD		627	121		3	(< 20)	517 ug/Kg	03/16/05	TJE
Chlorobenzene	MS	17.3 U	564	109	(86-123)			517 ug/Kg	03/16/05	TJE
	MSD		558	108		1	(< 20)	517 ug/Kg	03/16/05	TJE
Ethylbenzene	MS	17.3 U	587	113	(84-127)			517 ug/Kg	03/16/05	TJE
	MSD		579	112		1	(< 20)	517 ug/Kg	03/16/05	TJE



SGS Ref.# 614326 Matrix Spike  
614327 Matrix Spike Duplicate

Printed Date/Time 03/24/2005 14:58  
Prep Batch VXX 13340  
Method Vol. Extraction SW8260 Fiel  
Date 03/15/2005

Original 1051054002  
Matrix Soil/Solid

Parameter	Qualifiers	Original Result	QC Result	Pet Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date	Init
Volatile Gas Chromatography/Mass Spectroscopy										
P & M -Xylene	MS	34.5 U	1120	108	(88-124)			1040 ug/Kg	03/16/05	TJE
	MSD		1110	107		1	(< 20)	1040 ug/Kg	03/16/05	TJE
o-Xylene	MS	17.3 U	550	106	(87-123)			517 ug/Kg	03/16/05	TJE
	MSD		550	106		0	(< 20)	517 ug/Kg	03/16/05	TJE
Styrene	MS	17.3 U	583	113	(87-124)			517 ug/Kg	03/16/05	TJE
	MSD		579	112		1	(< 20)	517 ug/Kg	03/16/05	TJE
Bromoform	MS	17.3 U	572	110	(72-130)			517 ug/Kg	03/16/05	TJE
	MSD		579	112		1	(< 20)	517 ug/Kg	03/16/05	TJE
Isopropylbenzene (Cumene)	MS	17.3 U	574	111	(90-126)			517 ug/Kg	03/16/05	TJE
	MSD		568	110		1	(< 20)	517 ug/Kg	03/16/05	TJE
Bromobenzene	MS	17.3 U	542	105	(66-121)			517 ug/Kg	03/16/05	TJE
	MSD		535	103		1	(< 20)	517 ug/Kg	03/16/05	TJE
1,2,3-Trichloropropane	MS	34.5 U	577	112	(87-128)			517 ug/Kg	03/16/05	TJE
	MSD		580	112		0	(< 20)	517 ug/Kg	03/16/05	TJE
1,1,2,2-Tetrachloroethane	MS	34.5 U	583	113	(77-132)			517 ug/Kg	03/16/05	TJE
	MSD		573	111		2	(< 20)	517 ug/Kg	03/16/05	TJE
n-Propylbenzene	MS	17.3 U	569	110	(88-131)			517 ug/Kg	03/16/05	TJE
	MSD		542	105		5	(< 20)	517 ug/Kg	03/16/05	TJE
2-Chlorotoluene	MS	17.3 U	563	109	(85-128)			517 ug/Kg	03/16/05	TJE
	MSD		560	108		1	(< 20)	517 ug/Kg	03/16/05	TJE
4-Chlorotoluene	MS	17.3 U	565	109	(87-126)			517 ug/Kg	03/16/05	TJE
	MSD		539	104		5	(< 20)	517 ug/Kg	03/16/05	TJE
1,3,5-Trimethylbenzene	MS	17.3 U	547	106	(89-128)			517 ug/Kg	03/16/05	TJE
	MSD		532	103		3	(< 20)	517 ug/Kg	03/16/05	TJE
tert-Butylbenzene	MS	17.3 U	559	108	(89-128)			517 ug/Kg	03/16/05	TJE
	MSD		543	105		3	(< 20)	517 ug/Kg	03/16/05	TJE
1,2,4-Trimethylbenzene	MS	17.3 U	529	102	(88-125)			517 ug/Kg	03/16/05	TJE
	MSD		512	99		3	(< 20)	517 ug/Kg	03/16/05	TJE
sec-Butylbenzene	MS	17.3 U	569	110	(90-132)			517 ug/Kg	03/16/05	TJE
	MSD		555	107		3	(< 20)	517 ug/Kg	03/16/05	TJE
1,3-Dichlorobenzene	MS	17.3 U	545	105	(87-121)			517 ug/Kg	03/16/05	TJE
	MSD		530	102		3	(< 20)	517 ug/Kg	03/16/05	TJE
4-Isopropyltoluene	MS	17.3 U	545	105	(91-127)			517 ug/Kg	03/16/05	TJE
	MSD		523	101		4	(< 20)	517 ug/Kg	03/16/05	TJE
1,4-Dichlorobenzene	MS	17.3 U	539	104	(87-125)			517 ug/Kg	03/16/05	TJE
	MSD		519	100		4	(< 20)	517 ug/Kg	03/16/05	TJE
1,2-Dichlorobenzene	MS	17.3 U	528	102	(85-119)			517 ug/Kg	03/16/05	TJE
	MSD		517	100		2	(< 20)	517 ug/Kg	03/16/05	TJE
n-Butylbenzene	MS	17.3 U	566	109	(88-130)			517 ug/Kg	03/16/05	TJE
	MSD		545	105		4	(< 20)	517 ug/Kg	03/16/05	TJE

# SGS

SGS Ref.# 614326 Matrix Spike  
614327 Matrix Spike Duplicate

Printed Date/Time 03/24/2005 14:58  
Prep Batch VXX 13340  
Method Vol. Extraction SW8260 Fiel  
Date 03/15/2005

Original 1051054002  
Matrix Soil/Solid

Parameter	Qualifiers	Original Result	QC Result	Pet Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date	Init
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## Volatile Gas Chromatography/Mass Spectroscopy

1,2-Dibromo-3-chloropropane	MS	69.0 U	578	112	(81-130)			517 ug/Kg	03/16/05	TJE
	MSD		585	113		1	(< 20)	517 ug/Kg	03/16/05	TJE
1,2,4-Trichlorobenzene	MS	34.5 U	523	101	(83-125)			517 ug/Kg	03/16/05	TJE
	MSD		533	103		2	(< 20)	517 ug/Kg	03/16/05	TJE
Hexachlorobutadiene	MS	34.5 U	504	97	(84-134)			517 ug/Kg	03/16/05	TJE
	MSD		502	97		0	(< 20)	517 ug/Kg	03/16/05	TJE
Naphthalene	MS	34.5 U	514	99	(79-122)			517 ug/Kg	03/16/05	TJE
	MSD		544	105		6	(< 20)	517 ug/Kg	03/16/05	TJE
Methyl-t-butyl ether	MS	27.6 U	927	119	(85-122)			777 ug/Kg	03/16/05	TJE
	MSD		893	115		4	(< 20)	777 ug/Kg	03/16/05	TJE
1,2,3-Trichlorobenzene	MS	34.5 U	535	103	(79-129)			517 ug/Kg	03/16/05	TJE
	MSD		558	108		4	(< 20)	517 ug/Kg	03/16/05	TJE
Surrogates										
Dibromofluoromethane <surr>	MS			104	(83-119)			404 ug/Kg	03/16/05	TJE
	MSD			111		7		404 ug/Kg	03/16/05	TJE
1,2-Dichloroethane-D4 <surr>	MS			112	(83-122)			404 ug/Kg	03/16/05	TJE
	MSD			114		1		404 ug/Kg	03/16/05	TJE
Toluene-d8 <surr>	MS			99	(87-115)			404 ug/Kg	03/16/05	TJE
	MSD			106		6		404 ug/Kg	03/16/05	TJE
4-Bromofluorobenzene <surr>	MS			90	(46-133)			1080 ug/Kg	03/16/05	TJE
	MSD			95		6		1080 ug/Kg	03/16/05	TJE

Batch VMS 7326  
Method SW8260B  
Instrument HP 5890 Series II MSI VMA

# SGS

SGS Ref.# 614221 Method Blank  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Matrix Soil/Solid

Printed Date/Time 03/24/2005 14:58  
Prep Batch  
Method  
Date

QC results affect the following production samples:

1051337001, 1051337002, 1051337003, 1051337004, 1051337005, 1051337006, 1051337007, 1051337008,  
1051337009

Sample Remarks:

Parameter	Results	Reporting Limit	Units	Analysis Date	Init
Solids					
Total Solids	100		%	03/15/05	JC
Batch	SPT 5946				
Method	SM20 2540G				
Instrument					



# SGS

SGS Ref.# 614222 Duplicate  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Original 1051337001  
Matrix Soil/Solid

Printed Date/Time 03/24/2005 14:58  
Prep Batch  
Method  
Date

QC results affect the following production samples:

1051337001, 1051337002, 1051337003, 1051337004, 1051337005, 1051337006, 1051337007, 1051337008, 1051337009

Sample Remarks:

Parameter	Original Result	QC Result	Units	RPD	RPD Limits	Analysis Date	Init
Solids							
Total Solids	96.7	96.4	%	0	(< 5)	03/15/05	JC
Batch	SPT 5946						
Method	SM20 2540G						
Instrument							

**SGS Environmental Services Inc.**  
**Alaska Division**  
**Level 2 Laboratory Data Report**

Project: 4th & Gambell

Client: BGES Inc.

SGS Work Order: 1051802

Released by: (Signature) Shane Poston  
(Printed Name) Shane Poston  
(Title) Asst Tech Dir / PM  
(Date) 4-20-05

**Contents:**

Case Narrative  
Chain of Custody/Sample Rec Form  
Final Report Page  
Quality Control Summary Forms

**Note:**

Unless otherwise noted, all quality assurance/quality control criteria is in compliance with the standards set forth by the proper regulatory authority, the SGS Quality Assurance Program Plan, and the National Environmental Accreditation Conference.

This report contains a total number of 32 pages.

## Case Narrative

Customer: BGESINC

BGES Inc.

Project: 1051802

4th & Gambell

### 620146 MB

8260 - MB result for 1,2,3-trichlorobenzene is greater than one half the PQL. This analyte is not detected above the PQL in any of the associated samples.

### 620148 LCSD

8260 - LCSD RPD's for vinyl chloride, bromomethane, and chloroethane do not meet laboratory QC criteria. These analytes are not detected above the PQL in any of the associated samples.

### 620156 CCV

8260 - CCV result for dichlorodifluoromethane is biased low and does not meet laboratory QC criteria. The PQL for this analyte is considered estimated in the associated samples.

8260 - CCV result for acetone is biased high and does not meet laboratory QC criteria. This analyte is not detected above the PQL in any of the associated samples.

### 620158 CCV

8260 - CCV results for several analytes are biased high and do not meet laboratory QC criteria. These analytes are either not detected above the PQL in the associated samples or not reported in association with this CCV.

8260 - CCV results for dibromodifluoromethane(surr) and 1,2-dichloroethane-D4(surr) are biased high and do not meet laboratory QC criteria.

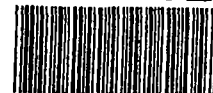


SGS

## SAMPLE RECEIPT FORM

SGS WO#:

1051802



Yes No NA

Are samples **RUSH**, priority, or w/n 72 hrs. of hold time? ☒ Yes ☐ No ☐ NA  
If yes have you done e-mail notification? ☒ Yes ☐ No ☐ NA  
Are samples **within 24 hrs.** of hold time or due date? ☒ Yes ☐ No ☐ NA  
If yes, have you **spoken with** Supervisor? ☒ Yes ☐ No ☐ NA  
Archiving bottles- if req., are they properly marked? ☒ Yes ☐ No ☐ NA  
Are there any problems? PM Notified? ☒ Yes ☐ No ☐ NA  
Were samples preserved correctly and pH-verified? ☒ Yes ☐ No ☐ NA

\* Bubble in VOA ③C = 1cm

If this is for PWS, provide **PWSID**.

Will courier charges apply?

Method of payment?

Data package required? (Level: 1 / 2 / 3 / 4)

Notes:

Is this a DoD project? (USACE, Navy, AFCEE)

Due Date: 4-21-05

Received Date: 4-7-05

Received Time: 1212

Is date/time conversion necessary? ☒ Yes

# of hours to AK Local Time:

Thermometer ID: 5D

Cooler ID	Temp Blank	Cooler Temp
1	1.8 °C	1.6 °C
	°C	°C
	°C	°C
	°C	°C
	°C	°C

\*Temperature readings include thermometer correction factors

Delivery method (circle all that apply): Client

Alert Courier / UPS / FedEx / USPS /

AA Goldstreak / NAC / ERA / PenAir / Carllie

Lynden / SGS / Other:

Airbill #

Additional Sample Remarks: (✓ if applicable)

Extra Sample Volume?

Limited Sample Volume?

Field preserved for volatiles?

Field-filtered for dissolved?

Lab-filtered for dissolved?

Ref Lab required?

Foreign Soil?

This section must be filled out for DoD projects (USACE, Navy, AFCEE)

Yes No

Is received temperature  $4 \pm 2^\circ\text{C}$ ?

Exceptions:

Samples/Analyses Affected:

Rad Screen performed?

Result:

Was there an airbill? (Note # above in the right hand column)

Was cooler sealed with custody seal?

# / where:

Were seal(s) intact upon arrival?

Was there a COC with cooler?

Was the COC filled out properly?

Did the COC indicate GOE / AFCEE / Navy project?

Did the COC and samples correspond?

Were all sample packed to prevent breakage?

Packing material:

Were all samples unbroken and clearly labeled?

Were all samples sealed in separate plastic bags?

Were all VOCs free of headspace and/or MeOH preserved?

Were correct container / sample sizes submitted?

Is sample condition good?

Was copy of CoC, SRF, and custody seals given to PM to fax?

This section must be filled if problems are found

Yes No

Was client notified of problems?

Individual contacted:

Via Phone / Fax / Email (circle one)

Date/Time:

Reason for contact:

Change Order Required?

SGS Contact:

Notes:

also received boxes for disposal

24x 4oz 1/2 septa TW + MeOH

48x 4oz amber

Completed by (sign):


(print):

James Johnson

Login proof (check one): ☒ waived ☐ required

performed by:

4

**SAMPLE RECEIPT FORM (page 2)**

SGS WO#:

Bottle Totals					15		
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८५

Completed by: \_\_\_\_\_

Date: 4-7-05



## Laboratory Analysis Report

200 W. Potter Drive  
Anchorage, AK 99518-1605  
Tel: (907) 562-2343  
Fax: (907) 561-5301  
Web: <http://www.us.sgs.com>

Keith Guyer  
BGES Inc.  
P.O. Box 110126  
Anchorage, AK 99511

Work Order: 1051802  
4th & Gambell  
Client: BGES Inc.  
Report Date: April 19, 2005

Released by:

Shane Poston

Digitally signed by Shane Poston  
DN: ON = Shane Poston, C = US, OU =  
SGS Anchorage, AK  
Date: 2005.04.20 14:11:33 -08'00'

Enclosed are the analytical results associated with the above workorder.

As required by the state of Alaska and the USEPA, a formal Quality Assurance/Quality Control Program is maintained by SGS. A copy of our Quality Control Manual that outlines this program is available at your request. The laboratory ADEC certification numbers are AK971-05 (DW), UST-005 (CS) and AK00971 (Micro).

Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS Quality Assurance Program Plan and the National Environmental Laboratory Accreditation Conference.

If you have any questions regarding this report or if we can be of any other assistance, please call your SGS Project Manager at (907) 562-2343.

The following descriptors may be found on your report which will serve to further qualify the data.

PQL	Practical Quantitation Limit (reporting limit).
U	Indicates the analyte was analyzed for but not detected.
F	Indicates an estimated value that falls below PQL, but is greater than the MDL.
J	The quantitation is an estimation.
B	Indicates the analyte is found in a blank associated with the sample.
*	The analyte has exceeded allowable regulatory or control limits.
GT	Greater Than
D	The analyte concentration is the result of a dilution.
LT	Less Than
!	Surrogate out of control limits.
Q	QC parameter out of acceptance range.
M	A matrix effect was present.
JL	The analyte was positively identified, but the quantitation is a low estimation.
E	The analyte result is high outside of calibrated range.

Note: Soil samples are reported on a dry weight basis unless otherwise specified.



SGS Ref.# 1051802001  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID MW-1  
Matrix Water (Surface, Eff., Ground)

All Dates/Times are Alaska Standard Time  
Printed Date/Time 04/19/2005 14:37  
Collected Date/Time 04/06/2005 18:28  
Received Date/Time 04/08/2005 8:40  
Technical Director Stephen C. Ede

Sample Remarks:

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile Gas Chromatography/Mass Spectroscopy									
Dichlorodifluoromethane	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Chloromethane	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Vinyl chloride	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Bromomethane	15.0 U	15.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Chloroethane	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,1-Dichloroethene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Trichlorofluoromethane	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Methylene chloride	25.0 U	25.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Carbon disulfide	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Acetone	50.0 U	50.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
trans-1,2-Dichloroethene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,1-Dichloroethane	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
2,2-Dichloropropane	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
cis-1,2-Dichloroethene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
2-Butanone (MEK)	50.0 U	50.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Bromochloromethane	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Chloroform	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,1,1-Trichloroethane	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Carbon tetrachloride	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,1-Dichloropropene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Benzene	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Trichloroethene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2-Dichloropropane	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Dibromomethane	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Bromodichloromethane	2.50 U	2.50	ug/L	SW8260B	C		04/18/05	04/19/05	VS
2-Chloroethyl Vinyl Ether	50.0 U	50.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
cis-1,3-Dichloropropene	2.50 U	2.50	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Toluene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS





SGS Ref.# 1051802001  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID MW-1  
Matrix Water (Surface, Eff, Ground)

All Dates/Times are Alaska Standard Time  
Printed Date/Time 04/19/2005 14:37  
Collected Date/Time 04/06/2005 18:28  
Received Date/Time 04/08/2005 8:40  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile Gas Chromatography/Mass Spectroscopy									
trans-1,3-Dichloropropene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,1,2-Trichloroethane	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Tetrachloroethene	1490	50.0	ug/L	SW8260B	C		04/18/05	04/18/05	VS
1,3-Dichloropropane	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Dibromochloromethane	2.50 U	2.50	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2-Dibromoethane	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Chlorobenzene	2.50 U	2.50	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,1,1,2-Tetrachloroethane	2.50 U	2.50	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Ethylbenzene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
P & M -Xylene	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Styrene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Bromofom	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Isopropylbenzene (Cumene)	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Bromobenzene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
o-Xylene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,1,2,2-Tetrachloroethane	2.50 U	2.50	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2,3-Trichloropropane	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
n-Propylbenzene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
2-Chlorotoluene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
4-Chlorotoluene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,3,5-Trimethylbenzene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
tert-Butylbenzene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2,4-Trimethylbenzene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
sec-Butylbenzene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
4-Isopropyltoluene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,4-Dichlorobenzene	2.50 U	2.50	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2-Dichlorobenzene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,3-Dichlorobenzene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
n-Butylbenzene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2-Dibromo-3-chloropropane	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2,4-Trichlorobenzene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS



SGS Ref.# 1051802001  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID MW-1  
Matrix Water (Surface, Eff., Ground)

All Dates/Times are Alaska Standard Time  
Printed Date/Time 04/19/2005 14:37  
Collected Date/Time 04/06/2005 18:28  
Received Date/Time 04/08/2005 8:40  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile Gas Chromatography/Mass Spectroscopy									
Hexachlorobutadiene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Naphthalene	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2,3-Trichlorobenzene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
4-Methyl-2-pentanone (MIBK)	50.0 U	50.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
2-Hexanone	50.0 U	50.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Methyl-t-butyl ether	25.0 U	25.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1-Chlorohexane	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2-Dichloroethane	2.50 U	2.50	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Acrylonitrile	50.0 U	50.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
trans 1,4-Dichloro-2-Butene	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Vinyl acetate	50.0 U	50.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Methyl iodide	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Surrogates									
Dibromofluoromethane <surr>	111		%	SW8260B	C	85-115	04/18/05	04/19/05	VS
1,2-Dichloroethane-D4 <surr>	114		%	SW8260B	C	72-119	04/18/05	04/19/05	VS
Toluene-d8 <surr>	107		%	SW8260B	C	85-120	04/18/05	04/19/05	VS
4-Bromofluorobenzene <surr>	110		%	SW8260B	C	76-119	04/18/05	04/19/05	VS



SGS Ref# 1051802002  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID MW-2  
Matrix Water (Surface, Eff., Ground)

All Dates/Times are Alaska Standard Time  
Printed Date/Time 04/19/2005 14:37  
Collected Date/Time 04/06/2005 18:02  
Received Date/Time 04/08/2005 8:40  
Technical Director Stephen C. Ede

Sample Remarks:

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile Gas Chromatography/Mass Spectroscopy									
Dichlorodifluoromethane	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Chloromethane	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Vinyl chloride	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Bromomethane	6.00 U	6.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Chloroethane	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,1-Dichloroethene	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Trichlorofluoromethane	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Methylene chloride	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Carbon disulfide	4.00 U	4.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Acetone	20.0 U	20.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
trans-1,2-Dichloroethene	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,1-Dichloroethane	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
2,2-Dichloropropane	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
cis-1,2-Dichloroethene	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
2-Butanone (MEK)	20.0 U	20.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Bromochloromethane	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Chloroform	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,1,1-Trichloroethane	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Carbon tetrachloride	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,1-Dichloropropene	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Benzene	0.800 U	0.800	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Trichloroethene	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2-Dichloropropane	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Dibromomethane	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Bromodichloromethane	1.00 U	1.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
2-Chloroethyl Vinyl Ether	20.0 U	20.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
cis-1,3-Dichloropropene	1.00 U	1.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Toluene	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS



SGS Ref# 1051802002  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID MW-2  
Matrix Water (Surface, Eff., Ground)

All Dates/Limes are Alaska Standard Time  
Printed Date/Time 04/19/2005 14:37  
Collected Date/Time 04/06/2005 18:02  
Received Date/Time 04/08/2005 8:40  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile Gas Chromatography/Mass Spectroscopy									
trans-1,3-Dichloropropene	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,1,2-Trichloroethane	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Tetrachloroethene	70.7	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,3-Dichloropropane	0.800 U	0.800	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Dibromochloromethane	1.00 U	1.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2-Dibromoethane	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Chlorobenzene	1.00 U	1.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,1,1,2-Tetrachloroethane	1.00 U	1.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Ethylbenzene	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
P & M -Xylene	4.00 U	4.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Styrene	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Bromoform	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Isopropylbenzene (Cumene)	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Bromobenzene	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
o-Xylene	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,1,2,2-Tetrachloroethane	1.00 U	1.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2,3-Trichloropropane	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
n-Propylbenzene	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
2-Chlorotoluene	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
4-Chlorotoluene	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,3,5-Trimethylbenzene	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
tert-Butylbenzene	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2,4-Trimethylbenzene	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
sec-Butylbenzene	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
4-Isopropyltoluene	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,4-Dichlorobenzene	1.00 U	1.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2-Dichlorobenzene	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,3-Dichlorobenzene	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
n-Butylbenzene	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2-Dibromo-3-chloropropane	4.00 U	4.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2,4-Trichlorobenzene	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS



SGS Ref.# 1051802002  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID MW-2  
Matrix Water (Surface, Eff., Ground)

All Dates/Times are Alaska Standard Time  
Printed Date/Time 04/19/2005 14:37  
Collected Date/Time 04/06/2005 18:02  
Received Date/Time 04/08/2005 8:40  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile Gas Chromatography/Mass Spectroscopy									
Hexachlorobutadiene	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Naphthalene	4.00 U	4.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2,3-Trichlorobenzene	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
4-Methyl-2-pentanone (MIBK)	20.0 U	20.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
2-Hexanone	20.0 U	20.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Methyl-t-butyl ether	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1-Chlorohexane	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2-Dichloroethane	1.00 U	1.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Acrylonitrile	20.0 U	20.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
trans 1,4-Dichloro-2-Butene	4.00 U	4.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Vinyl acetate	20.0 U	20.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Methyl iodide	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Surrogates									
Dibromofluoromethane <surr>	115		%	SW8260B	C	85-115	04/18/05	04/19/05	VS
1,2-Dichloroethane-D4 <sum>	114		%	SW8260B	C	72-119	04/18/05	04/19/05	VS
Toluene-d8 <surr>	105		%	SW8260B	C	85-120	04/18/05	04/19/05	VS
4-Bromofluorobenzene <surr>	105		%	SW8260B	C	76-119	04/18/05	04/19/05	VS



SGS Ref.# 1051802003  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID MW-3  
Matrix Water (Surface, Effi, Ground)

All Dates/Times are Alaska Standard Time  
Printed Date/Time 04/19/2005 14:37  
Collected Date/Time 04/06/2005 18:39  
Received Date/Time 04/08/2005 8:40  
Technical Director Stephen C. Ede

Sample Remarks:

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile Gas Chromatography/Mass Spectroscopy									
Dichlorodifluoromethane	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Chloromethane	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Vinyl chloride	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Bromomethane	15.0 U	15.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Chloroethane	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,1-Dichloroethene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Trichlorofluoromethane	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Methylene chloride	25.0 U	25.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Carbon disulfide	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Acetone	50.0 U	50.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
trans-1,2-Dichloroethene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,1-Dichloroethane	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
2,2-Dichloropropane	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
cis-1,2-Dichloroethene	5.00 U	5.00	ng/L	SW8260B	C		04/18/05	04/19/05	VS
2-Butanone (MEK)	50.0 U	50.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Bromochloromethane	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Chloroform	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,1,1-Trichloroethane	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Carbon tetrachloride	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,1-Dichloropropene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Benzene	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Trichloroethene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2-Dichloropropane	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Dibromomethane	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Bromodichloromethane	2.50 U	2.50	ug/L	SW8260B	C		04/18/05	04/19/05	VS
2-Chloroethyl Vinyl Ether	50.0 U	50.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
cis-1,3-Dichloropropene	2.50 U	2.50	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Toluene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS



SGS Ref.# 1051802003  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID MW-3  
Matrix Water (Surface, Eff., Ground)

All Dates/Times are Alaska Standard Time  
Printed Date/Time 04/19/2005 14:37  
Collected Date/Time 04/06/2005 18:39  
Received Date/Time 04/08/2005 8:40  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile Gas Chromatography/Mass Spectroscopy									
trans-1,3-Dichloropropene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,1,2-Trichloroethane	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Tetrachloroethene	1790	50.0	ug/L	SW8260B	C		04/18/05	04/18/05	VS
1,3-Dichloropropane	2.00 U	2.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Dibromochloromethane	2.50 U	2.50	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2-Dibromoethane	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Chlorobenzene	2.50 U	2.50	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,1,1,2-Tetrachloroethane	2.50 U	2.50	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Ethylbenzene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
P & M -Xylene	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Styrene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Bromoform	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Isopropylbenzene (Cumene)	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Bromobenzene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
o-Xylene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,1,2,2-Tetrachloroethane	2.50 U	2.50	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2,3-Trichloropropane	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
n-Propylbenzene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
2-Chlorotoluene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
4-Chlorotoluene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,3,5-Trimethylbenzene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
tert-Butylbenzene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2,4-Trimethylbenzene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
sec-Butylbenzene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
4-Isopropyltoluene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,4-Dichlorobenzene	2.50 U	2.50	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2-Dichlorobenzene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,3-Dichlorobenzene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
n-Butylbenzene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2-Dibromo-3-chloropropane	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2,4-Trichlorobenzene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS



SGS Ref.# 1051802003  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID MW-3  
Matrix Water (Surface, Eff., Ground)

All Dates/Times are Alaska Standard Time  
Printed Date/Time 04/19/2005 14:37  
Collected Date/Time 04/06/2005 18:39  
Received Date/Time 04/08/2005 8:40  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
<b>Volatile Gas Chromatoaraphy/Mass Spectroscopy</b>									
Hexachlorobutadiene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Naphthalene	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2,3-Trichlorobenzene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
4-Methyl-2-pentanone (MIBK)	50.0 U	50.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
2-Hexanone	50.0 U	50.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Methyl-t-butyl ether	25.0 U	25.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1-Chlorohexane	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2-Dichloroethane	2.50 U	2.50	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Acrylonitrile	50.0 U	50.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
trans 1,4-Dichloro-2-Butene	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Vinyl acetate	50.0 U	50.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Methyl iodide	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
<b>Surrogates</b>									
Dibromofluoromethane <surr>	111		%	SW8260B	C	85-115	04/18/05	04/19/05	VS
1,2-Dichloroethane-D4 <surr>	112		%	SW8260B	C	72-119	04/18/05	04/19/05	VS
Toluene-d8 <sun>	107		%	SW8260B	C	85-120	04/18/05	04/19/05	VS
4-Bromofluorobenzene <surr>	107		%	SW8260B	C	76-119	04/18/05	04/19/05	VS





SGS Ref# 1051802004  
Client Name BGES Inc.  
Project Name# 4th & Gambell  
Client Sample ID MW-4  
Matrix Water (Surface, Eff., Ground)

All Dates/Times are Alaska Standard Time  
Printed Date/Time 04/19/2005 14:37  
Collected Date/Time 04/06/2005 19:15  
Received Date/Time 04/08/2005 8:40  
Technical Director Stephen C. Ede

Sample Remarks:

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile Gas Chromatography/Mass Spectroscopy									
Dichlorodifluoromethane	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Chloromethane	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Vinyl chloride	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Bromomethane	30.0 U	30.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Chloroethane	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,1-Dichloroethene	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Trichlorofluoromethane	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Methylene chloride	50.0 U	50.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Carbon disulfide	20.0 U	20.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Acetone	100 U	100	ug/L	SW8260B	C		04/18/05	04/19/05	VS
trans-1,2-Dichloroethene	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,1-Dichloroethane	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
2,2-Dichloropropane	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
cis-1,2-Dichloroethene	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
2-Butanone (MEK)	100 U	100	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Bromochloromethane	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Chloroform	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,1,1-Trichloroethane	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Carbon tetrachloride	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,1-Dichloropropene	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Benzene	4.00 U	4.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Trichloroethene	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2-Dichloropropane	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Dibromomethane	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Bromodichloromethane	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
2-Chloroethyl Vinyl Ether	100 U	100	ug/L	SW8260B	C		04/18/05	04/19/05	VS
cis-1,3-Dichloropropene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Toluene	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS



SGS Ref.# 1051802004  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID MW-4  
Matrix Water (Surface, Eff., Ground)

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Collected Date/Time 04/06/2005 19:15  
Received Date/Time 04/08/2005 8:40  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile Gas Chromatography/Mass Spectroscopy									
trans-1,3-Dichloropropene	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,1,2-Trichloroethane	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Tetrachloroethene	372	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,3-Dichloropropane	4.00 U	4.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Dibromochloromethane	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2-Dibromoethane	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Chlorobenzene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,1,1,2-Tetrachloroethane	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Ethylbenzene	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
P & M -Xylene	20.0 U	20.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Styrene	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Bromoform	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Isopropylbenzene (Cumene)	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Bromobenzene	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
o-Xylene	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2,3-Trichloropropane	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
n-Propylbenzene	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
2-Chlorotoluene	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,1,2,2-Tetrachloroethane	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
4-Chlorotoluene	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,3,5-Trimethylbenzene	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
tert-Butylbenzene	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2,4-Trimethylbenzene	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
sec-Butylbenzene	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
4-Isopropyltoluene	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,4-Dichlorobenzene	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2-Dichlorobenzene	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,3-Dichlorobenzene	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
n-Butylbenzene	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2-Dibromo-3-chloropropane	20.0 U	20.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2,4-Trichlorobenzene	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS



SGS Ref.# 1051802004  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID MW-4  
Matrix Water (Surface, Eff., Ground)

All Dates/Times are Alaska Standard Time

Printed Date/Time 04/19/2005 14:37  
Collected Date/Time 04/06/2005 19:15  
Received Date/Time 04/08/2005 8:40  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile Gas Chromatography/Mass Spectroscopy									
Hexachlorobutadiene	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Naphthalene	20.0 U	20.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2,3-Trichlorobenzene	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
4-Methyl-2-pentanone (MIBK)	100 U	100	ug/L	SW8260B	C		04/18/05	04/19/05	VS
2-Hexanone	100 U	100	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Methyl-t-butyl ether	50.0 U	50.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1-Chlorobexane	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
1,2-Dichloroethane	5.00 U	5.00	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Acrylonitrile	100 U	100	ug/L	SW8260B	C		04/18/05	04/19/05	VS
trans 1,4-Dichloro-2-Butene	20.0 U	20.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Vinyl acetate	100 U	100	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Methyl iodide	10.0 U	10.0	ug/L	SW8260B	C		04/18/05	04/19/05	VS
Surrogates									
Dibromofluoromethane <sun>	115		%	SW8260B	C	85-115	04/18/05	04/19/05	VS
1,2-Dichloropethane-D4 <sun>	116		%	SW8260B	C	72-119	04/18/05	04/19/05	VS
Toluene-d8 <sun>	106		%	SW8260B	C	85-120	04/18/05	04/19/05	VS
4-Bromofluorobenzene <sun>	111		%	SW8260B	C	76-119	04/18/05	04/19/05	VS



SGS Ref.# 1051802005  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID Trip Blanks  
Matrix Water (Surface, Eff., Ground)

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Collected Date/Time 04/06/2005 19:15  
Received Date/Time 04/08/2005 8:40  
Technical Director Stephen C. Ede

Sample Remarks:

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	init
Volatile Gas Chromatography/Mass Spectroscopy									
Dichlorodifluoromethane	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
Chloromethane	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
Vinyl chloride	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
Bromomethane	3.00 U	3.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
Chloroethane	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
1,1-Dichloroethene	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
Trichlorofluoromethane	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
Methylene chloride	5.00 U	5.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
Carbon disulfide	2.00 U	2.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
Acetone	10.0 U	10.0	ug/L	SW8260B	B		04/18/05	04/19/05	VS
trans-1,2-Dichloroethene	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
1,1-Dichloroethane	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
2,2-Dichloropropane	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
cis-1,2-Dichloroethene	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
2-Butanone (MEK)	10.0 U	10.0	ug/L	SW8260B	B		04/18/05	04/19/05	VS
Bromochloromethane	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
Chloroform	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
1,1,1-Trichloroethane	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
Carbon tetrachloride	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
1,1-Dichloropropene	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
Benzene	0.400 U	0.400	ug/L	SW8260B	B		04/18/05	04/19/05	VS
Trichloroethene	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
1,2-Dichloropropane	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
Dibromomethane	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
Bromodichloromethane	0.500 U	0.500	ug/L	SW8260B	B		04/18/05	04/19/05	VS
2-Chloroethyl Vinyl Ether	10.0 U	10.0	ug/L	SW8260B	B		04/18/05	04/19/05	VS
cis-1,3-Dichloropropene	0.500 U	0.500	ug/L	SW8260B	B		04/18/05	04/19/05	VS
Toluene	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS



SGS Ref.# 1051802005  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID Trip Blanks  
Matrix Water (Surface, Eff., Ground)

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Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile Gas Chromatography/Mass Spectroscopy									
trans-1,3-Dichloropropene	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
1,1,2-Trichloroethane	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
Tetrachloroethene	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
1,3-Dichloropropane	0.400 U	0.400	ug/L	SW8260B	B		04/18/05	04/19/05	VS
Dibromochloromethane	0.500 U	0.500	ug/L	SW8260B	B		04/18/05	04/19/05	VS
1,2-Dibromoethane	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
Chlorobenzene	0.500 U	0.500	ug/L	SW8260B	B		04/18/05	04/19/05	VS
1,1,1,2-Tetrachloroethane	0.500 U	0.500	ug/L	SW8260B	B		04/18/05	04/19/05	VS
Ethylbenzene	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
P & M -Xylene	2.00 U	2.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
Styrene	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
Bromoform	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
Isopropylbenzene (Cumene)	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
Bromobenzene	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
o-Xylene	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
1,2,3-Trichloropropane	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
n-Propylbenzene	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
2-Chlorotoluene	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
1,1,2,2-Tetrachloroethane	0.500 U	0.500	ug/L	SW8260B	B		04/18/05	04/19/05	VS
4-Chlorotoluene	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
1,3,5-Trimethylbenzene	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
tert-Butylbenzene	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
1,2,4-Trimethylbenzene	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
sec-Butylbenzene	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
4-Isopropyltoluene	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
1,4-Dichlorobenzene	0.500 U	0.500	ug/L	SW8260B	B		04/18/05	04/19/05	VS
1,2-Dichlorobenzene	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
1,3-Dichlorobenzene	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
n-Butylbenzene	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
1,2-Dibromo-3-chloropropane	2.00 U	2.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
1,2,4-Trichlorobenzene	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS



SGS Ref# 1051802005  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Client Sample ID Trip Blanks  
Matrix Water (Surface, Effi, Ground)

All Dates/Times are Alaska Standard Time  
Printed Date/Time 04/19/2005 14:37  
Collected Date/Time 04/06/2005 19:15  
Received Date/Time 04/08/2005 8:40  
Technical Director Stephen C. Ede

Parameter	Results	PQL	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile Gas Chromatography/Mass Spectroscopy									
Hexachlorobutadiene	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
Naphthalene	2.00 U	2.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
1,2,3-Trichlorobenzene	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
4-Methyl-2-pentanone (MIBK)	10.0 U	10.0	ug/L	SW8260B	B		04/18/05	04/19/05	VS
2-Hexanone	10.0 U	10.0	ug/L	SW8260B	B		04/18/05	04/19/05	VS
Methyl-t-butyl ether	5.00 U	5.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
1-Chlorohexane	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
1,2-Dichloroethane	0.500 U	0.500	ug/L	SW8260B	B		04/18/05	04/19/05	VS
Acrylonitrile	10.0 U	10.0	ug/L	SW8260B	B		04/18/05	04/19/05	VS
trans 1,4-Dichloro-2-Butene	2.00 U	2.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
Vinyl acetate	10.0 U	10.0	ug/L	SW8260B	B		04/18/05	04/19/05	VS
Methyl iodide	1.00 U	1.00	ug/L	SW8260B	B		04/18/05	04/19/05	VS
Surrogates									
Dibromofluoromethane <surr>	111		%	SW8260B	B	85-115	04/18/05	04/19/05	VS
1,2-Dichloroethane-D4 <sun>	111		%	SW8260B	B	72-119	04/18/05	04/19/05	VS
Toluene-d8 <surr>	104		%	SW8260B	B	85-120	04/18/05	04/19/05	VS
4-Bromofluorobenzene <sun>	102		%	SW8260B	B	76-119	04/18/05	04/19/05	VS

# SGS

Client # 620146 Method Blank  
Client Name BGES Inc.  
Project Name / # 4th & Gambell  
Matrix Water (Surface, Eff., Ground)

Printed Date / Time 04/19/2005 14:37  
Prep Batch VXX13457  
Method SW5030B  
Date 04/18/2005

QC results affect the following production samples:

1051802001, 1051802002, 1051802003, 1051802004, 1051802005

Sample Remarks:

8260 - MB result for 1,2,3-trichlorobenzene is greater than one half the PQL. This analyte is not detected above the PQL in any of the associated samples.

Parameter	Results	Reporting/Control Limit	Units	Analysis Date
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Volatile Gas Chromatography/Mass Spectroscopy



Client # 620146 Method Blank  
Client Name BGES Inc.  
Project Name / # 4th & Gambell  
Matrix Water (Surface, Eff, Ground)

Printed Date / Time 04/19/2005 14:37  
Prep Batch VXX13457  
Method SW5030B  
Date 04/18/2005

Parameter	Results	Reporting/Control Limit	Units	Analysis Date
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>				
Dichlorodifluoromethane	1.00 U	1.00	ug/L	04/18/05
Chloromethane	1.00 U	1.00	ug/L	04/18/05
Vinyl chloride	1.00 U	1.00	ug/L	04/18/05
Bromomethane	3.00 U	3.00	ug/L	04/18/05
Chloroethane	1.00 U	1.00	ug/L	04/18/05
Trichlorofluoromethane	1.00 U	1.00	ug/L	04/18/05
1,1-Dichloroethene	1.00 U	1.00	ug/L	04/18/05
Methylene chloride	5.00 U	5.00	ug/L	04/18/05
Carbon disulfide	2.00 U	2.00	ug/L	04/18/05
Acetone	10.0 U	10.0	ug/L	04/18/05
trans-1,2-Dichloroethene	1.00 U	1.00	ug/L	04/18/05
1,1-Dichloroethane	1.00 U	1.00	ug/L	04/18/05
2,2-Dichloropropane	1.00 U	1.00	ug/L	04/18/05
cis-1,2-Dichloroethene	1.00 U	1.00	ug/L	04/18/05
2-Butanone (MEK)	10.0 U	10.0	ug/L	04/18/05
Bromochloromethane	1.00 U	1.00	ug/L	04/18/05
Chloroform	1.00 U	1.00	ug/L	04/18/05
1,1,1-Trichloroethane	1.00 U	1.00	ug/L	04/18/05
Carbon tetrachloride	1.00 U	1.00	ug/L	04/18/05
1,1-Dichloropropene	1.00 U	1.00	ug/L	04/18/05
Benzene	0.400 U	0.400	ug/L	04/18/05
Trichloroethene	1.00 U	1.00	ug/L	04/18/05
1,2-Dichloropropane	1.00 U	1.00	ug/L	04/18/05
Dibromomethane	1.00 U	1.00	ug/L	04/18/05
Bromodichloromethane	0.500 U	0.500	ug/L	04/18/05
2-Chloroethyl Vinyl Ether	10.0 U	10.0	ug/L	04/18/05
cis-1,3-Dichloropropene	0.500 U	0.500	ug/L	04/18/05
Toluene	1.00 U	1.00	ug/L	04/18/05
trans-1,3-Dichloropropene	1.00 U	1.00	ug/L	04/18/05
1,1,2-Trichloroethane	1.00 U	1.00	ug/L	04/18/05
Tetrachloroethene	1.00 U	1.00	ug/L	04/18/05
1,3-Dichloropropane	0.400 U	0.400	ug/L	04/18/05
Dibromochloromethane	0.500 U	0.500	ug/L	04/18/05
1,2-Dibromoethane	1.00 U	1.00	ug/L	04/18/05
Chlorobenzene	0.500 U	0.500	ug/L	04/18/05
1,1,1,2-Tetrachloroethane	0.500 U	0.500	ug/L	04/18/05
Ethylbenzene	1.00 U	1.00	ug/L	04/18/05
P & M -Xylene	2.00 U	2.00	ug/L	04/18/05
Styrene	1.00 U	1.00	ug/L	04/18/05





Client # 620146 Method Blank  
Client Name BGES Inc.  
Project Name / # 4th & Gambell  
Matrix Water (Surface, Eff., Ground)

Printed Date / Time 04/19/2005 14:37  
Prep Batch VXX13457  
Method SW5030B  
Date 04/18/2005

Parameter	Results	Reporting/Control Limit	Units	Analysis Date
<b>Volatile Gas Chromatography/Mass Spectroscopy</b>				
Bromoform	1.00 U	1.00	ug/L	04/18/05
Isopropylbenzene (Cumene)	1.00 U	1.00	ug/L	04/18/05
Bromobenzene	1.00 U	1.00	ug/L	04/18/05
o-Xylene	1.00 U	1.00	ug/L	04/18/05
1,1,2,2-Tetrachloroethane	0.500 U	0.500	ug/L	04/18/05
1,2,3-Trichloropropane	1.00 U	1.00	ug/L	04/18/05
n-Propylbenzene	1.00 U	1.00	ug/L	04/18/05
2-Chlorotoluene	1.00 U	1.00	ug/L	04/18/05
4-Chlorotoluene	1.00 U	1.00	ug/L	04/18/05
1,3,5-Trimethylbenzene	1.00 U	1.00	ug/L	04/18/05
tert-Butylbenzene	1.00 U	1.00	ug/L	04/18/05
1,2,4-Trimethylbenzene	1.00 U	1.00	ug/L	04/18/05
sec-Butylbenzene	1.00 U	1.00	ug/L	04/18/05
4-Isopropyltoluene	1.00 U	1.00	ug/L	04/18/05
1,4-Dichlorobenzene	0.500 U	0.500	ug/L	04/18/05
1,2-Dichlorobenzene	1.00 U	1.00	ug/L	04/18/05
n-Butylbenzene	1.00 U	1.00	ug/L	04/18/05
1,3-Dichlorobenzene	1.00 U	1.00	ug/L	04/18/05
1,2-Dibromo-3-chloropropane	2.00 U	2.00	ug/L	04/18/05
1,2,4-Trichlorobenzene	0.330F	1.00	ug/L	04/18/05
Hexachlorobutadiene	1.00 U	1.00	ug/L	04/18/05
Naphthalene	2.00 U	2.00	ug/L	04/18/05
1,2,3-Trichlorobenzene	0.540F	1.00	ug/L	04/18/05
4-Methyl-2-pentanone (MIBK)	10.0 U	10.0	ug/L	04/18/05
2-Hexanone	10.0 U	10.0	ug/L	04/18/05
Methyl-t-butyl ether	5.00 U	5.00	ug/L	04/18/05
1-Chlorohexane	1.00 U	1.00	ug/L	04/18/05
1,2-Dichloroethane	0.500 U	0.500	ug/L	04/18/05
Acrylonitrile	10.0 U	10.0	ug/L	04/18/05
trans 1,4-Dichloro-2-Butene	2.00 U	2.00	ug/L	04/18/05
Vinyl acetate	10.0 U	10.0	ug/L	04/18/05
Methyl iodide	1.00 U	1.00	ug/L	04/18/05
<b>Sorrogate s</b>				
Dibromofluoromethane <sur>	111	85-115	%	04/18/05
1,2-Dichloroethane-D4 <sur>	107	72-119	%	04/18/05
Toluene-d8 <sur>	104	85-120	%	04/18/05
4-Bromofluorobenzene <sur>	109	76-119	%	04/18/05

# SGS

Client # 620146 Method Blank  
Client Name BGES Inc.  
Project Name / # 4th & Gambell  
Matrix Water (Surface, Eff, Ground)

Printed Date / Time 04/19/2005 14:37  
Prep Batch VXX13457  
Method SW5030B  
Date 04/18/2005

Parameter	Results	Reporting/Control Limit	Units	Analysis Date
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## Volatile Gas Chromatography/Mass Spectroscopy

Batch VMS7376  
Method SW8260B  
Instrument HP 5890 Series II MS5 VLA



SGS Ref# 620147 Lab Control Sample  
620148 Lab Control Sample Duplicate  
Client Name BGES Inc.  
Project Name# 4th & Gambell  
Matrix Water (Surface, Bff, Ground)

Printed Date/Time 04/19/2005 14:37  
Prep Batch VXX13457  
Method SW5030B  
Date 04/18/2005

QC results affect the following production samples:

1051802001, 1051802002, 1051802003, 1051802004, 1051802005

Sample Remarks:

LCS

LCSD 8260 - LCSD RPD's for vinyl chloride, bromomethane, and chloroethane do not meet laboratory QC criteria. These analytes are not detected above the PQL in any of the associated samples.

Parameter	QC Results	Pet Recov	LCSD/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Volatile Gas Chromatography/Mass Spectroscopy



SGS Ref# 620147 Lab Control Sample  
620148 Lab Control Sample Duplicate  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Matrix Water (Surface, Eff., Ground)

Printed Date/Time 04/19/2005 14:37  
Prep Batch VXX13457  
Method SW5030B  
Date 04/18/2005

Parameter	QC Results	Pet Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
<u>Volatile Gas Chromatography/Mass Spectroscopy</u>							
Dichlorodifluoromethane	LCS 21.0	70	(54-131)			30 ug/L	04/18/2005
	LCSD 24.7	82		16	(< 20)	30 ug/L	04/18/2005
Chloromethane	LCS 21.8	73	(56-125)			30 ug/L	04/18/2005
	LCSD 25.2	84		15	(< 20)	30 ug/L	04/18/2005
Vinyl chloride	LCS 21.1	70	(50-134)			30 ug/L	04/18/2005
	LCSD 26.0	87		21 *	(< 20)	30 ug/L	04/18/2005
Bromomethane	LCS 19.3	64	(57-141)			30 ug/L	04/18/2005
	LCSD 24.0	80		22 *	(< 20)	30 ug/L	04/18/2005
Chloroethane	LCS 18.4	61	(60-133)			30 ug/L	04/18/2005
	LCSD 25.5	85		32 *	(< 20)	30 ug/L	04/18/2005
1,1-Dichloroethene	LCS 26.8	89	(70-130)			30 ug/L	04/18/2005
	LCSD 31.0	103		15	(< 20)	30 ug/L	04/18/2005
Trichlorofluoromethane	LCS 25.7	86	(72-129)			30 ug/L	04/18/2005
	LCSD 27.6	92		7	(< 20)	30 ug/L	04/18/2005
Methylene chloride	LCS 23.6	79	(72-120)			30 ug/L	04/18/2005
	LCSD 26.5	88		11	(< 20)	30 ug/L	04/18/2005
Carbon disulfide	LCS 30.2	67	(37-146)			45 ug/L	04/18/2005
	LCSD 35.2	78		15	(< 20)	45 ug/L	04/18/2005
Acetone	LCS 106	118	(51-135)			90 ug/L	04/18/2005
	LCSD 93.7	104		12	(< 20)	90 ug/L	04/18/2005
trans-1,2-Dichloroethene	LCS 26.3	88	(71-127)			30 ug/L	04/18/2005
	LCSD 27.7	92		5	(< 20)	30 ug/L	04/18/2005
1,1-Dichloroethane	LCS 26.3	88	(81-120)			30 ug/L	04/18/2005
	LCSD 28.1	94		7	(< 20)	30 ug/L	04/18/2005
2,2-Dichloropropane	LCS 25.7	86	(77-135)			30 ug/L	04/18/2005
	LCSD 26.8	89		4	(< 20)	30 ug/L	04/18/2005
cis-1,2-Dichloroethene	LCS 26.9	90	(79-120)			30 ug/L	04/18/2005
	LCSD 28.7	96		7	(< 20)	30 ug/L	04/18/2005



SGS Ref.# 620147 Lab Control Sample  
620148 Lab Control Sample Duplicate  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Matrix Water (Surface, Eff., Ground)

Printed Date/Time 04/19/2005 14:37  
Prep Batch VXX13457  
Method SW5030B  
Date 04/18/2005

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Volatile Gas Chromatography/Mass Spectroscopy

2-Butanone (MEK)	LCS	95.9	107	(67-136)			90 ug/L	04/18/2005
	LCSD	91.3	101		5	(< 20)	90 ug/L	04/18/2005
Bromochloromethane	LCS	27.9	93	(76-126)			30 ug/L	04/18/2005
	LCSD	29.8	99		7	(< 20)	30 ug/L	04/18/2005
Chloroform	LCS	26.3	88	(86-115)			30 ug/L	04/18/2005
	LCSD	28.1	94		7	(< 20)	30 ug/L	04/18/2005
1,1,1-Trichloroethane	LCS	25.7	86	(82-120)			30 ug/L	04/18/2005
	LCSD	27.6	92		7	(< 20)	30 ug/L	04/18/2005
Carbon tetrachloride	LCS	25.5	85	(79-132)			30 ug/L	04/18/2005
	LCSD	27.3	91		7	(< 20)	30 ug/L	04/18/2005
1,1-Dichloropropene	LCS	28.1	94	(80-121)			30 ug/L	04/18/2005
	LCSD	28.2	94		0	(< 20)	30 ug/L	04/18/2005
Benzene	LCS	27.1	90	(84-115)			30 ug/L	04/18/2005
	LCSD	27.6	92		2	(< 20)	30 ug/L	04/18/2005
Trichloroethene	LCS	27.5	92	(82-118)			30 ug/L	04/18/2005
	LCSD	27.9	93		1	(< 20)	30 ug/L	04/18/2005
1,2-Dichloropropane	LCS	29.0	97	(88-115)			30 ug/L	04/18/2005
	LCSD	29.4	98		1	(< 20)	30 ug/L	04/18/2005
Dibromomethane	LCS	28.9	96	(86-119)			30 ug/L	04/18/2005
	LCSD	29.2	97		1	(< 20)	30 ug/L	04/18/2005
Bromodichloromethane	LCS	27.7	92	(81-120)			30 ug/L	04/18/2005
	LCSD	27.8	93		0	(< 20)	30 ug/L	04/18/2005
2-Chloroethyl Vinyl Ether	LCS	52.5	117	(63-148)			45 ug/L	04/18/2005
	LCSD	53.2	118		1	(< 20)	45 ug/L	04/18/2005
cis-1,3-Dichloropropene	LCS	32.3	108	(90-126)			30 ug/L	04/18/2005
	LCSD	31.4	105		3	(< 20)	30 ug/L	04/18/2005
Toluene	LCS	29.2	97	(81-115)			30 ug/L	04/18/2005



SGS Ref.# 620147 Lab Control Sample  
620148 Lab Control Sample Duplicate  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Matrix Water (Surface, Eff., Ground)

Printed Date/Time 04/19/2005 14:37  
Prep Batch VXX13457  
Method SW5030B  
Date 04/18/2005

Parameter	QC Results	Pot Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
<u>Volatile Gas Chromatography/Mass Spectroscopy</u>							
	LCSD 28.6	95		2	(< 20)	30 ug/L	04/18/2005
trans-1,3-Dichloropropene	LCS 29.7	99	(89-125)			30 ug/L	04/18/2005
	LCSD 28.8	96		3	(< 20)	30 ug/L	04/18/2005
1,1,2-Trichloroethane	LCS 28.5	95	(86-116)			30 ug/L	04/18/2005
	LCSD 28.3	94		1	(< 20)	30 ug/L	04/18/2005
Tetrachloroethene	LCS 27.2	91	(79-117)			30 ug/L	04/18/2005
	LCSD 27.0	90		1	(< 20)	30 ug/L	04/18/2005
1,3-Dichloropropane	LCS 28.1	94	(86-118)			30 ug/L	04/18/2005
	LCSD 27.7	92		2	(< 20)	30 ug/L	04/18/2005
Dibromochloromethane	LCS 29.2	97	(88-116)			30 ug/L	04/18/2005
	LCSD 28.8	96		1	(< 20)	30 ug/L	04/18/2005
1,2-Dibromoethane	LCS 29.0	97	(86-119)			30 ug/L	04/18/2005
	LCSD 28.9	96		0	(< 20)	30 ug/L	04/18/2005
Chlorobenzene	LCS 27.9	93	(88-115)			30 ug/L	04/18/2005
	LCSD 27.8	93		0	(< 20)	30 ug/L	04/18/2005
1,1,1,2-Tetrachloroethane	LCS 27.2	91	(90-116)			30 ug/L	04/18/2005
	LCSD 28.2	94		4	(< 20)	30 ug/L	04/18/2005
Ethylbenzene	LCS 28.2	94	(85-120)			30 ug/L	04/18/2005
	LCSD 28.6	95		2	(< 20)	30 ug/L	04/18/2005
P & M -Xylene	LCS 56.3	94	(80-120)			60 ug/L	04/18/2005
	LCSD 56.8	95		1	(< 20)	60 ug/L	04/18/2005
Styrene	LCS 30.0	100	(84-129)			30 ug/L	04/18/2005
	LCSD 30.7	102		2	(< 20)	30 ug/L	04/18/2005
Bromoform	LCS 28.0	93	(85-126)			30 ug/L	04/18/2005
	LCSD 29.0	97		3	(< 20)	30 ug/L	04/18/2005
Isopropylbenzene (Cumene)	LCS 27.6	92	(80-120)			30 ug/L	04/18/2005
	LCSD 28.7	96		4	(< 20)	30 ug/L	04/18/2005



SGS Ref.# 620147 Lab Control Sample  
620148 Lab Control Sample Duplicate  
Client Name BGES Inc.  
Project Name/# 4th & Gambell  
Matrix Water (Surface, Eff., Ground)

Printed Date/Time 04/19/2005 14:37  
Prep Batch VXX13457  
Method SW5030B  
Date 04/18/2005

Parameter	QC Results	Pet Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
<u>Volatile Gas Chromatography/Mass Spectroscopy</u>							
Bromobenzene	LCS 31.6	105	(87-115)			30 ug/L	04/18/2005
	LCSD 29.7	99		6	(< 20)	30 ug/L	04/18/2005
o-Xylene	LCS 27.6	92	(80-120)			30 ug/L	04/18/2005
	LCSD 28.6	95		3	(< 20)	30 ug/L	04/18/2005
1,2,3-Trichloropropane	LCS 33.2	111	(86-118)			30 ug/L	04/18/2005
	LCSD 31.7	106		5	(< 20)	30 ug/L	04/18/2005
n-Propylbenzene	LCS 31.7	106	(87-123)			30 ug/L	04/18/2005
	LCSD 30.0	100		5	(< 20)	30 ug/L	04/18/2005
2-Chlorotoluene	LCS 31.5	105	(85-121)			30 ug/L	04/18/2005
	LCSD 29.8	99		6	(< 20)	30 ug/L	04/18/2005
1,1,2,2-Tetrachloroethane	LCS 32.7	109	(80-123)			30 ug/L	04/18/2005
	LCSD 30.2	101		8	(< 20)	30 ug/L	04/18/2005
4-Chlorotoluene	LCS 30.8	103	(81-126)			30 ug/L	04/18/2005
	LCSD 29.2	97		5	(< 20)	30 ug/L	04/18/2005
1,3,5-Trimethylbenzene	LCS 31.9	106	(87-118)			30 ug/L	04/18/2005
	LCSD 30.6	102		4	(< 20)	30 ug/L	04/18/2005
tert-Butylbenzene	LCS 34.4	115	(86-121)			30 ug/L	04/18/2005
	LCSD 31.1	104		10	(< 20)	30 ug/L	04/18/2005
1,2,4-Trimethylbenzene	LCS 31.0	103	(87-117)			30 ug/L	04/18/2005
	LCSD 30.2	101		3	(< 20)	30 ug/L	04/18/2005
sec-Butylbenzene	LCS 33.6	112	(88-125)			30 ug/L	04/18/2005
	LCSD 31.6	105		6	(< 20)	30 ug/L	04/18/2005
4-Isopropyltoluene	LCS 32.6	109	(83-119)			30 ug/L	04/18/2005
	LCSD 31.1	104		5	(< 20)	30 ug/L	04/18/2005
1,4-Dichlorobenzene	LCS 31.4	105	(82-121)			30 ug/L	04/18/2005
	LCSD 30.5	102		3	(< 20)	30 ug/L	04/18/2005
1,2-Dichlorobenzene	LCS 28.9	96	(86-114)			30 ug/L	04/18/2005
	LCSD 28.9	96		0	(< 20)	30 ug/L	04/18/2005

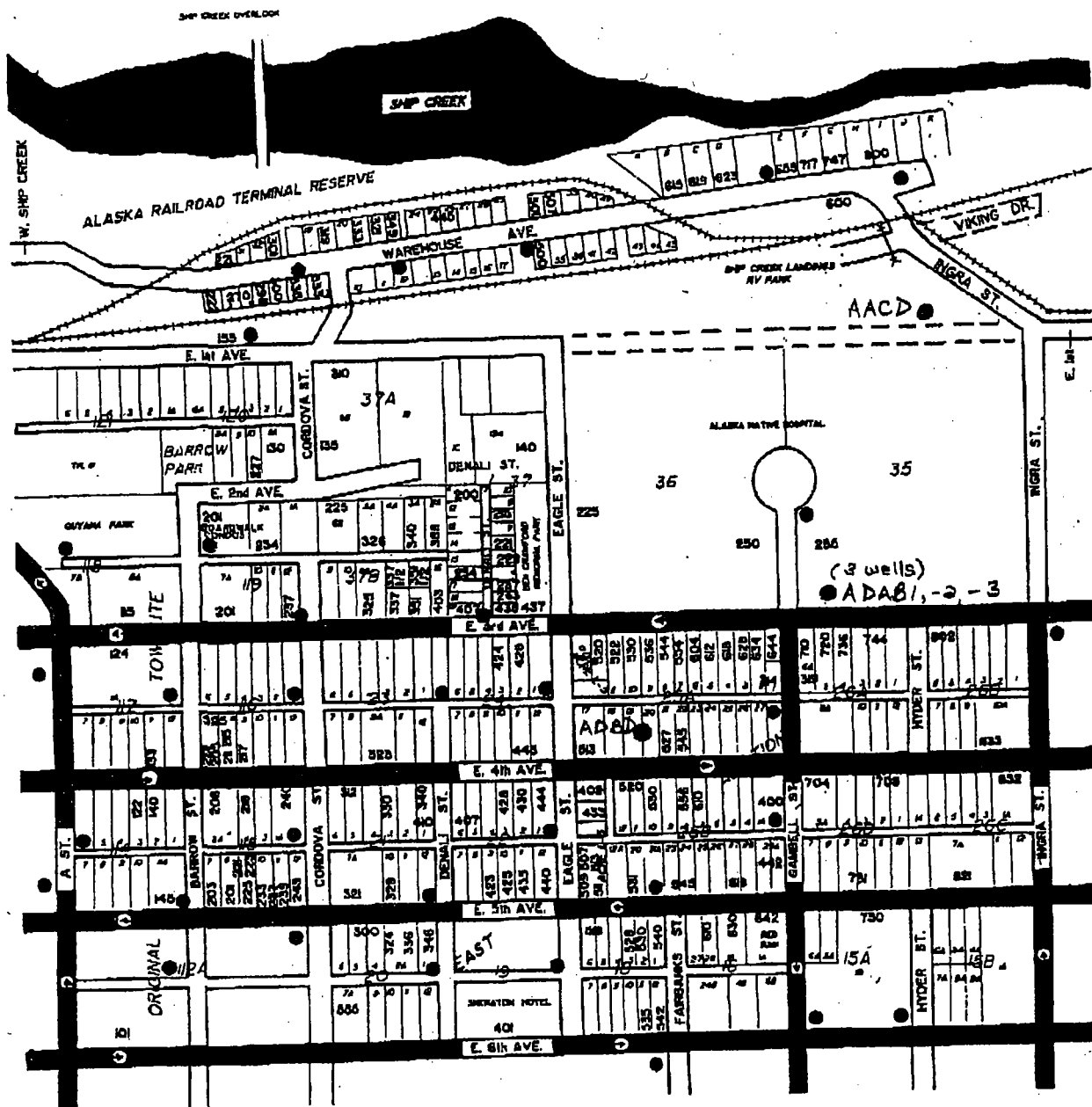


SGS Ref.# 620147 Lab Control Sample  
620148 Lab Control Sample Duplicate  
Client Name BGES Inc.  
ProjectName/# 4th & Gambell  
Matrix Water (Surface, Effl, Ground)

Printed Date/Time 04/19/2005 14:37  
Prep Batch VXX13457  
Method SW5030B  
Date 04/18/2005

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
<u>Volatile Gas Chromatography/Mass Spectroscopy</u>							
1,3-Dichlorobenzene	LCS 30.5	102	(83-118)			30 ug/L	04/18/2005
	LCSD 29.7	99		3	(< 20)	30 ug/L	04/18/2005
n-Butylbenzene	LCS 31.3	104	(83-130)			30 ug/L	04/18/2005
	LCSD 30.5	102		3	(< 20)	30 ug/L	04/18/2005
1,2-Dibromo-3-chloropropane	LCS 28.1	94	(80-122)			30 ug/L	04/18/2005
	LCSD 28.8	96		3	(< 20)	30 ug/L	04/18/2005
1,2,4-Trichlorobenzene	LCS 31.5	105	(85-120)			30 ug/L	04/18/2005
	LCSD 28.9	96		9	(< 20)	30 ug/L	04/18/2005
Hexachlorobutadiene	LCS 31.0	103	(81-126)			30 ug/L	04/18/2005
	LCSD 30.8	103		1	(< 20)	30 ug/L	04/18/2005
Naphthalene	LCS 30.1	100	(82-126)			30 ug/L	04/18/2005
	LCSD 26.7	89		12	(< 20)	30 ug/L	04/18/2005
1,2,3-Trichlorobenzene	LCS 33.0	110	(86-124)			30 ug/L	04/18/2005
	LCSD 28.2	94		16	(< 20)	30 ug/L	04/18/2005
4-Methyl-2-pentanone (MIBK)	LCS 92.3	103	(73-134)			90 ug/L	04/18/2005
	LCSD 97.4	108		5	(< 20)	90 ug/L	04/18/2005
2-Hexanone	LCS 90.2	100	(76-130)			90 ug/L	04/18/2005
	LCSD 92.8	103		3	(< 20)	90 ug/L	04/18/2005
Methyl-t-butyl ether	LCS 41.6	93	(83-119)			45 ug/L	04/18/2005
	LCSD 46.1	103		10	(< 20)	45 ug/L	04/18/2005
1-Chlorohexane	LCS 43.5	97	(75-125)			45 ug/L	04/18/2005
	LCSD 43.6	97		0	(< 20)	45 ug/L	04/18/2005
1,2-Dichloroethane	LCS 27.6	92	(82-119)			30 ug/L	04/18/2005
	LCSD 27.7	92		0	(< 20)	30 ug/L	04/18/2005
Acrylonitrile	LCS 45.7	102	(83-122)			45 ug/L	04/18/2005
	LCSD 49.9	111		9	(< 20)	45 ug/L	04/18/2005
trans 1,4-Dichloro-2-Butene	LCS 69.2	154	(80-171)			45 ug/L	04/18/2005



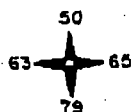


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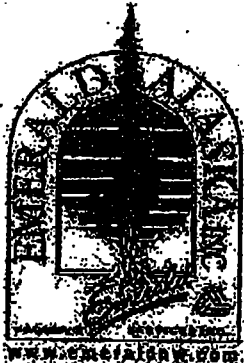
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SEE OVERVIEW MAP "G"

**APPENDIX F**

**DOCUMENTATION OF DISPOSAL OF INVESTIGATIVE-DERIVED WASTE**



**Emerald Alaska Inc**  
800 East Ship Creek  
Anchorage, AK 99501  
www.emeraldalaska.com (907) 258-1558 fax (907) 258-3049

**Facsimile Transmittal Sheet**  
Total Number of Pages (including cover sheet): 6

Date: 6/1/05  
From: Rhonda Strucher, Business Development  
To: Bob  
Company: BGEs  
Phone Number: \_\_\_\_\_  
Fax Number: 6962439

~~~~~Message~~~~~

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Please print or type. (Form designed for use on site (18 pinch) typewriter.)

Form Approved, OMB No. 2050-0032, Expires 8-30-94

| UNIFORM HAZARDOUS WASTE MANIFEST                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  | 1. Generator's US EPA ID No.<br>AK-P-000-201-574-000-001 | Manifest Document No.<br>4000-000-001 | 2. Page 1 of 1               | Information in the shaded areas is not required by Federal law. |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------|---------------------------------------|------------------------------|-----------------------------------------------------------------|
| 3. Generator's Name and Mailing Address<br>ALASKAN REAL ESTATE<br>1342 G STREET<br>ANCHORAGE, AK-99501                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | 4. Generator's Phone (907) 274-2834                      |                                       |                              |                                                                 |
| 5. Transporter 1 Company Name<br>EMERALD SERVICES, INC.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | 6. US EPA ID Number<br>WA-905-B-3-6-4-6-4-7              |                                       |                              |                                                                 |
| 7. Transporter 2 Company Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | 8. US EPA ID Number                                      |                                       |                              |                                                                 |
| 9. Designated Facility Name and Site Address<br>US ECOLOGY LAND, INC.<br>20400 LINLEY RD<br>GRAND VIEW, ID 83624                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  | 10. US EPA ID Number<br>I 00073114854                    |                                       |                              |                                                                 |
| 11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | 12. Containers<br>No.                                    | Type                                  | 13. Total Quantity           | 14. Unit Wt/Vol                                                 |
| a. <input checked="" type="checkbox"/> RQ, WASTE ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (TETRACHLOROETHENE), 9, UN3077, PG-III, RQ-10, ERG171                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | 8                                                        | D N                                   | 7540                         | P                                                               |
| b. <input checked="" type="checkbox"/> RQ, WASTE ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (TETRACHLOROETHENE), 9, UN3082, PG-III, RQ-10, ERG171                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  | 1                                                        | D N                                   | 200                          | P                                                               |
| c.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |                                                          |                                       |                              |                                                                 |
| d.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |                                                          |                                       |                              |                                                                 |
| 15. Special Handling Instructions and Additional Information                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                                                          |                                       |                              |                                                                 |
| 16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this certification are truly and accurately described above by proper sampling name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.<br>If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable means of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford. |  |                                                          |                                       |                              |                                                                 |
| Printed/Typed Name<br>PAUL L. MANEY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | Signature<br>Paul L. Maney                               |                                       | Month Day Year<br>10/5/10/05 |                                                                 |
| 17. Transporter 1 Acknowledgement of Receipt of Materials                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | Signature<br>Bryan Hoffman                               |                                       | Month Day Year<br>10/5/10/05 |                                                                 |
| 18. Transporter 2 Acknowledgement of Receipt of Materials                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | Signature                                                |                                       | Month Day Year               |                                                                 |
| 19. Discrepancy Indication Space                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                                                          |                                       |                              |                                                                 |
| 20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                                                          |                                       |                              |                                                                 |
| Printed/Typed Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | Signature                                                |                                       | Month Day Year               |                                                                 |



**Emerald Services RCRA Land Disposal Restriction Notification Form EZ**  
(This form is applicable to characteristic (D codes), listed waste (F, K, U and P codes), Contaminated Soil and Hazardous Debris)

Generator: Alaskan Real EstateU.S. E.P.A. I.D. #: AKR000201S74Profile #: USE17614Manifest #: 0331

The wastes identified in this form are subject to the land disposal restrictions of 40CFR Part 268. The wastes do not meet the treatment standards specified in Part 268, Subpart D or do not meet the applicable prohibition levels specified in 268.32 or RCRA Section 3004(d). Pursuant to 40CFR 256.7(a), the required information applicable to each waste is identified below (check all boxes that apply):

Treatability Group: ☐ Wastewater ☒ Non-Wastewater

(Wastewaters containing less than 1% filterable solids and less than 1% Total Organic Carbon)

- ☒ Dd01 Ignitable (except for high TOC) managed in non-CWA/non-CWA equivalent non-Class I SDWA systems (Complete Form U.C. Underlying hazardous constituents need not be addressed if the waste is to be combusted or recovered.)
- ☐ D001 Ignitable (except for high TOC) managed in CWA/CWA-equivalent /Class I SDWA systems
- ☐ D001 High TOC Ignitable (Greater than 10% organic carbon)
- ☐ D002 Corrosive managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems (Complete Form U.C.)
- ☐ D002 Corrosive managed in CWA/CWA-equivalent /Class I systems
- ☐ D003 Reactive Solids based on 261.23(a)(5)
- ☐ D003 Reactive Cyanides based on 261.23(a)(5)
- ☐ D003 Water Reactives based on 261.23(a)(2), (3), and (4) managed in non-CWA/non-CWA-equivalent/non-Class I SDWA systems (Complete Form U.C.)
- ☐ D003 Water Reactives based on 261.23(a)(2), (3) and (4) managed in CWA/CWA-equivalent /Class I SDWA systems
- ☐ D003 Other Reactives based on 261.23(a)(1)

If D004 - D043 boxes are checked, complete and attach Form U.C. to address underlying hazardous constituents (unless these wastes are to be managed in a CWA/CWA-equivalent/Class I SDWA system):

- |                                                          |                                                    |                                                     |
|----------------------------------------------------------|----------------------------------------------------|-----------------------------------------------------|
| <input type="checkbox"/> D004 Arsenic                    | <input type="checkbox"/> D018 Benzene              | <input type="checkbox"/> D032 Hexachlorobenzene     |
| <input type="checkbox"/> D005 Barium                     | <input type="checkbox"/> D019 Carbon Tetrachloride | <input type="checkbox"/> D033 Hexachlorobutadiene   |
| <input type="checkbox"/> D006 Cadmium                    | <input type="checkbox"/> D020 Chlordane            | <input type="checkbox"/> D034 Hexachloroethane      |
| <input type="checkbox"/> D007 Chromium                   | <input type="checkbox"/> D021 Chlorobenzene        | <input type="checkbox"/> D035 Methyl Ethyl Ketone   |
| <input type="checkbox"/> D008 Lead                       | <input type="checkbox"/> D022 Chloroform           | <input type="checkbox"/> D036 Nitrobenzene          |
| <input type="checkbox"/> D009 Mercury (< 260ppm; non-RR) | <input type="checkbox"/> D023 o-Cresol             | <input type="checkbox"/> D037 Femachlorophenol      |
| <input type="checkbox"/> D009 Mercury (< 260ppm; RR)     |                                                    |                                                     |
| <input type="checkbox"/> D009 Mercury (> 260ppm; non-RR) |                                                    |                                                     |
| <input type="checkbox"/> D009 Mercury (> 260 ppm; RR)    |                                                    |                                                     |
| <input type="checkbox"/> D010 Selenium                   | <input type="checkbox"/> D024 m-Cresol             | <input type="checkbox"/> D038 Pyridine              |
| <input type="checkbox"/> D011 Silver                     | <input type="checkbox"/> D025 p-Cresol             | <input type="checkbox"/> D039 Tetrachloroethylene   |
| <input type="checkbox"/> D012 Endrin                     | <input type="checkbox"/> D026 Cresols (Total)      | <input type="checkbox"/> D040 Dichlorodicylene      |
| <input type="checkbox"/> D013 Lindane                    | <input type="checkbox"/> D027 p-Dichlorobenzene    | <input type="checkbox"/> D041 2,4,3-Trichlorophenol |
| <input type="checkbox"/> D014 Methoxychlor               | <input type="checkbox"/> D028 1,2-Dichloroethane   | <input type="checkbox"/> D042 2,4,6-Trichlorophenol |
| <input type="checkbox"/> D015 Toxaphene                  | <input type="checkbox"/> D029 1,1-Dichloroethylene | <input type="checkbox"/> D043 Vinyl Chloride        |
| <input type="checkbox"/> D016 2,4-D                      | <input type="checkbox"/> D030 2,4-Dinitrophenol    |                                                     |
| <input type="checkbox"/> D017 2,4,5-TP (Silvex)          | <input type="checkbox"/> D031 Heptachlor           |                                                     |

In addition, the following wastes are included in this shipment:

- ☐ F001 - F005 Spent Solvents. (If this box is checked, complete F001-F005 section on the back of this form. Check the hazardous number(s) that apply and identify the constituents likely to be present in the waste.)
- ☐ F039 Multisource Leachate. If this box is checked, complete and attach Form U.C. to identify the individual constituents.
- ☐ Contaminated Soil that meets the LDR standard found in 268 Subpart D (If this box is checked, complete the Contaminated Soil section on the back of this form.)
- ☐ Hazardous Debris (If this box is checked, complete the Hazardous Debris section on the back of this form.)

If this shipment carries additional waste codes that are not addressed above, identify them here:

EPA Waste Code Subcategory (if any) EPA Waste Code Subcategory (if any) EPA Waste Code Subcategory (if any)

\_\_\_\_\_

**F001 - F005 Spent Solvents**

Check the box (es) that apply. Identify the individual constituents that are present.

(Form EZ Page 2)

| Hazardous Waste Description                                                            | Regulated Hazardous Constituents                        |                                                                |
|----------------------------------------------------------------------------------------|---------------------------------------------------------|----------------------------------------------------------------|
| <input checked="" type="checkbox"/> F001 Spent Halogenated Solvents used in Degreasing | <input type="checkbox"/> Carbon Tetrachloride           | <input type="checkbox"/> Methylene Chloride                    |
|                                                                                        | <input checked="" type="checkbox"/> Tetrachloroethylene | <input type="checkbox"/> 1,1,1-Trichloroethane                 |
|                                                                                        | <input type="checkbox"/> Trichloroethylene              | <input type="checkbox"/> 1,1,2-Trichloro-1,2,2-trifluoroethane |
|                                                                                        | <input type="checkbox"/> Trichloromonofluoromethane     |                                                                |
| <input type="checkbox"/> F002 Spent Halogenated Solvents                               | <input type="checkbox"/> Carbon Tetrachloride           | <input type="checkbox"/> Methylene Chloride                    |
|                                                                                        | <input type="checkbox"/> Tetrachloroethylene            | <input type="checkbox"/> 1,1,1-Trichloroethane                 |
|                                                                                        | <input type="checkbox"/> Trichloroethylene              | <input type="checkbox"/> 1,1,2-Trichloro-1,2,2-trifluoroethane |
|                                                                                        | <input type="checkbox"/> Trichloromonofluoromethane     |                                                                |
| <input type="checkbox"/> F003 Spent Non-Halogenated Solvents                           | <input type="checkbox"/> Acetone                        | <input type="checkbox"/> n-Butyl Alcohol                       |
|                                                                                        | <input type="checkbox"/> Cyclohexanone *                | <input type="checkbox"/> Ethyl Acetate                         |
|                                                                                        | <input type="checkbox"/> Ethyl Benzene                  | <input type="checkbox"/> Ethyl Ether                           |
|                                                                                        | <input type="checkbox"/> Methanol *                     | <input type="checkbox"/> Methyl Isobutyl Ketone                |
|                                                                                        | <input type="checkbox"/> Xylenes (Total)                |                                                                |
| <input type="checkbox"/> F004 Spent Non-Halogenated Solvents                           | <input type="checkbox"/> m-Cresol                       | <input type="checkbox"/> o-Cresol                              |
|                                                                                        | <input type="checkbox"/> p-Cresol                       | <input type="checkbox"/> Cresol Mixed Isomers (Cresylic Acid)  |
|                                                                                        | <input type="checkbox"/> Nitrobenzene                   |                                                                |
| <input type="checkbox"/> F005 Spent Non-Halogenated Solvents                           | <input type="checkbox"/> Benzene                        | <input type="checkbox"/> Carbon Disulfide *                    |
|                                                                                        | <input type="checkbox"/> 2-Ethoxyethanol                | <input type="checkbox"/> Isobutyl Alcohol                      |
|                                                                                        | <input type="checkbox"/> Methyl Ethyl Ketone            | <input type="checkbox"/> 2-Nitropropane                        |
|                                                                                        | <input type="checkbox"/> Pyridine                       | <input type="checkbox"/> Toluene                               |

\* The treatment standards for carbon disulfide, cyclohexanone and methanol non-wastewaters are based on the TCLP and apply to spent solvent non-wastewaters containing only one, two or all three of these constituents. The treatment standards for these three constituents do not apply when any of the other F001-F005 constituents are present in the waste.

**Contaminated Soil Waste**

- ☐ This shipment contains contaminated soil with listed hazardous waste and does not exhibit a characteristic of hazardous waste and is subject to the soil treatment standards as provided by 268.49(c) of the universal treatment standards.
- ☐ This shipment contains contaminated soil which does not contain hazardous waste and does not exhibit a characteristic of hazardous waste and complies with the soil treatment standards as provided by 268.49(c) of the universal treatment standards.

**Hazardous Debris**

The definition of "debris" and "hazardous debris" are in 40CFR 268.2. Per 268.45, hazardous debris must be treated for each "contaminant subject to treatment." To determine these, look up the waste code in 268.40 and list the regulated hazardous constituents for each code. Check the box that applies.

- ☐ This shipment contains hazardous debris that will be treated to comply with the alternative treatment standards of 268.45 (e.g. macroencapsulation or abstractive blasting).
- ☐ This shipment contains hazardous debris that will be treated to meet the 268.40 treatment standards for the waste(s) contaminating the debris.

The contaminants subject to treatment for this debris are identified below:

| EPA Waste Code | Subcategory (if any) | Contaminants Subject to Treatment |
|----------------|----------------------|-----------------------------------|
| _____          | _____                | _____                             |
| _____          | _____                | _____                             |
| _____          | _____                | _____                             |
| _____          | _____                | _____                             |